

```

      1           5           10           15
Leu Thr Ser Glu Asp Ala Val Leu Asn Met Ala Ala Ser Leu Ser Gly
      20           25           30
Trp Gln Glu Ala Ala Leu Val Gly Leu Ala Ser Gly Met Thr Pro Glu
      35           40           45
Gln Val Arg Gln Glu Leu Leu Glu Ser Pro Glu Glu Leu Pro Glu Pro
      50           55           60
Ser Lys Lys Gln His Gly His Ala Ala Ser Pro Arg Glu Pro Asp Val
65           70           75           80
Glu Leu Leu Glu Ser Leu Arg Arg Pro Ala Ala Ala Met Glu Phe Ala
      85           90           95
Thr Ile Glu Gly Val Asp
      100

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<210> 229

<211> 743

<212> DNA

<213> Homo sapiens

<400> 229

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nnggctaggg acacggcctc ctctcaaca ggcagtgcct gtgcaggctc aggggcatca
60
tcaaagataa cacagggtg gtcaggggct gctggctgct cctgccccag gactggctcc
120
aggatgggca aggctgcctc cctggtagcc agggggagag gggaaggag caccaggag
180
tgggccagca ggtgtggcat cggccaggag gagatggagg ccagcagcag ccaagaccag
240
agtaaagtgt ctgccccagg ggtgctcaca gcccaggacc gggtagttag aaagccagcc
300
cagcttggca ctcagcggag ccaggaggca gatgttcagg actgggagtt cagaaagagg
360
gattcccagg gcacttactc cagccgggat gcagaactcc aggaccagga attcggaag
420
agagattcac tgggtaccta cagtagtcga gatgtaagcc ttggggactg ggaatttggg
480
aagagagatt ctctgggtgc ttatgccagc caagatgcca acgagcaggg ccaagatttg
540
gggaagaggg accaccatgg taggtacagc agccaggatg ccgatgagca ggactgggag
600
tttcagaaga gagatgtgtc actcggcacc tatggcagcc gggctgcgga gccacaggaa
660
caggagtttg ggaagagcgc ttggataagg gactacagca gtggtggcag ctccaggacc
720
cttgacgccc aggacagaag ctt
743

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<210> 230

<211> 247

<212> PRT

<213> Homo sapiens

<400> 230

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Xaa Ala Arg Asp Thr Ala Ser Ser Ser Thr Gly Ser Ala Cys Ala Gly

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      1           5           10           15
Ser Gly Ala Ser Ser Lys Ile Thr Gln Gly Trp Ser Gly Ala Ala Gly
      20           25           30
Cys Ser Cys Pro Arg Thr Gly Ser Arg Met Gly Lys Ala Ala Ser Leu
      35           40           45
Val Ala Arg Gly Arg Gly Glu Gly Ser Thr Arg Glu Trp Ala Ser Arg
      50           55           60
Cys Gly Ile Gly Gln Glu Glu Met Glu Ala Ser Ser Ser Gln Asp Gln
      65           70           75           80
Ser Lys Val Ser Ala Pro Gly Val Leu Thr Ala Gln Asp Arg Val Val
      85           90           95
Gly Lys Pro Ala Gln Leu Gly Thr Gln Arg Ser Gln Glu Ala Asp Val
      100          105          110
Gln Asp Trp Glu Phe Arg Lys Arg Asp Ser Gln Gly Thr Tyr Ser Ser
      115          120          125
Arg Asp Ala Glu Leu Gln Asp Gln Glu Phe Gly Lys Arg Asp Ser Leu
      130          135          140
Gly Thr Tyr Ser Ser Arg Asp Val Ser Leu Gly Asp Trp Glu Phe Gly
      145          150          155          160
Lys Arg Asp Ser Leu Gly Ala Tyr Ala Ser Gln Asp Ala Asn Glu Gln
      165          170          175
Gly Gln Asp Leu Gly Lys Arg Asp His His Gly Arg Tyr Ser Ser Gln
      180          185          190
Asp Ala Asp Glu Gln Asp Trp Glu Phe Gln Lys Arg Asp Val Ser Leu
      195          200          205
Gly Thr Tyr Gly Ser Arg Ala Ala Glu Pro Gln Glu Gln Glu Phe Gly
      210          215          220
Lys Ser Ala Trp Ile Arg Asp Tyr Ser Ser Gly Gly Ser Ser Arg Thr
      225          230          235          240
Leu Asp Ala Gln Asp Arg Ser
      245

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<210> 231

<211> 431

<212> DNA

<213> Homo sapiens

<400> 231

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acgcgttggc caccgagagg ctggcgaggg tgtgcagcac ggcgcagtgt ggcaggggtcc
60
caggggtgcag cctgcgcagc agctcctcca tcaccttget gatgaactgt cttcccacgg
120
ccaccaggac gccactcgcc gcctgctgcc agtcccagac caggtccttc gtcttgggtca
180
tctcgctgga ggccaggagg atgatgggtgc tggctgtgtc cttgtccagc tcaactggcgc
240
gactgctcag gaccctctcc atggccctca ggaccgctgc tcggtatggg tgtgccagct
300
tgtcatgctg ccgcagatac tctcgcagg cacggagcgt ctccaccctg ctggacgcc
360
tcaccgataa ggaccccctg gtgcaggagc aggtctgcag tgcctgtgc tccctcgggg
420
aggtgcggcc g
431

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<210> 232
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Ala Ser Ser Arg Val Glu Thr Leu Arg Ala Cys Glu Glu Tyr Leu
 1 5 10 15
 Arg Gln His Asp Lys Leu Ala His Pro Tyr Arg Ala Ala Val Leu Arg
 20 25 30
 Ala Met Glu Arg Val Leu Ser Ser Arg Ala Ser Glu Leu Asp Lys Asp
 35 40 45
 Thr Ala Ser Thr Ile Ile Leu Leu Ala Ser Ser Glu Met Thr Lys Thr
 50 55 60
 Lys Asp Leu Val Trp Asp Trp Gln Gln Ala Ala Ser Gly Val Leu Val
 65 70 75 80
 Ala Val Gly Arg Gln Phe Ile Ser Lys Val Met Glu Glu Leu Leu Arg
 85 90 95
 Arg Leu His Pro Gly Thr Leu Pro His Cys Ala Val Leu His Thr Leu
 100 105 110
 Ala Ser Leu Ser Val Ala Asn Ala
 115 120

<210> 233
 <211> 606
 <212> DNA
 <213> Homo sapiens

<400> 233
 acgcgttcag ggatgccaga aatctaactg ggtaataaaa agctgggaga acattccaga
 60
 aaggtgggca cccttagcat tccccaaaag caccagccct cctcctcctt ccagcttct
 120
 gtgctggaat gcacccccat cggaaaggct cgaaaactca ggacacatta ggatcacctg
 180
 gaaagcatTT gtcaaaacgc atctccctgc gggtcagggt ccaagttaaa atcaaacttc
 240
 aggtgatgct gactcagggt gctccagaaa cacctgggga agcagcactt tggaggctgc
 300
 ctctcacatc cccccacag caagtgggca gggagctagg taaatctcct tccagttga
 360
 gaaggggctc ggagcaggca cagagaagag atacccttag aatgcaagtt gttcagctgc
 420
 gaaagtccag cctgcaggct tcctgggcaa gctagtgggc tgaagtatgc cacagcaaca
 480
 ggcttctaga gccggctgcc cagctcctac tctgctctg ccactcactg actgtgtggt
 540
 cttgagcagg tcacctgtct gacttgggtga gagctgacag gcatcacctg ttagaggctt
 600
 acgcgt
 606

<210> 234

<211> 108
 <212> PRT
 <213> Homo sapiens

<400> 234
 Met His Pro His Arg Lys Gly Ser Lys Thr Gln Asp Thr Leu Gly Ser
 1 5 10 15
 Pro Gly Lys His Leu Ser Lys Arg Ile Ser Leu Arg Val Arg Val Gln
 20 25 30
 Val Lys Ile Lys Leu Gln Val Met Leu Thr Gln Val Ala Pro Glu Thr
 35 40 45
 Pro Gly Glu Ala Ala Leu Trp Arg Leu Pro Leu Thr Ser Thr Pro Gln
 50 55 60
 Gln Val Gly Arg Glu Leu Gly Lys Ser Pro Ser Gln Leu Arg Arg Gly
 65 70 75 80
 Ser Glu Gln Ala Gln Arg Arg Asp Thr Leu Arg Met Gln Val Val Gln
 85 90 95
 Leu Arg Lys Ser Ser Leu Gln Ala Ser Trp Ala Ser
 100 105

<210> 235
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 235
 cgaccgttga ctattctcta caaaccacaa agacaatgat tgatttaact gaatttagaa
 60
 atagcaaaca cttaaaacag cagcagtaca gagctgaaaa ccagattctt ttgaaagaga
 120
 ttgaaagtct agaggaagaa cgacttgatc tgaaaaaaaa aattcgccaa atggctcaag
 180
 aaagaggaaa aagaagggca acttcaggat taaccactgg ggacctgaac ctaactgaaa
 240
 acattttctca aggagataga ataagtgaaa gaaaattgga tttattgagc ctcaaaaata
 300
 tgagtgaagc acaatcaaag aatgaatt
 328

<210> 236
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 236
 Met Ile Asp Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln Gln
 1 5 10 15
 Gln Tyr Arg Ala Glu Asn Gln Ile Leu Leu Lys Glu Ile Glu Ser Leu
 20 25 30
 Glu Glu Glu Arg Leu Asp Leu Lys Lys Lys Ile Arg Gln Met Ala Gln
 35 40 45
 Glu Arg Gly Lys Arg Arg Ala Thr Ser Gly Leu Thr Thr Gly Asp Leu
 50 55 60
 Asn Leu Thr Glu Asn Ile Ser Gln Gly Asp Arg Ile Ser Glu Arg Lys

65					70					75				80
Leu	Asp	Leu	Leu	Ser	Leu	Lys	Asn	Met	Ser	Glu	Ala	Gln	Ser	Lys
				85					90					95
Glu														

<210> 237
 <211> 2059
 <212> DNA
 <213> Homo sapiens

<400> 237
 ggccataagg gcacgacgca ttcctagccg atgcaccaac acgggcatga agcctgccga
 60
 gagcacgaag ccggcggtcca tagctacggc ccatacggtc atgtctgccca tggctccggt
 120
 gatgtcagac tgcacatgaa atcgggttacg gtaccccagg atcatcgcta ccgagtacac
 180
 cccgaacagc acccgctggg cgccgatcag cgtgaggagg tgccccacca gtggcacttt
 240
 tcttagatag cggaacccat ccaccacatc ccagtcacc gttctcatcg tccgggaacg
 300
 atccaccagt gggggcccac gctcccgacg tgaaaactgc agcccctagg cgaccgagac
 360
 tgccaagagg gctgcgagga tgcagaaaat gatcgtgtcg gcgtgggtgca caggaatatg
 420
 gcgtccggca atcatgcgca ctgctgcagc aacaaccgca ccgatcatga gccctagcgg
 480
 ccaatcggtg gcatgattga cgatgccgtc aggtagtcgc gcttgctgat ggtgtattcc
 540
 aaccagcga ccaaggcggg gagcaaaaac cggttcaggc tcatcgcgat gagcaacca
 600
 atgagcaagg ccagggtggga gggcttatcg cgcgcaccac ccagaccaa gatccccagc
 660
 ccgaccagg tgacggcacg cattcatctg cgtattgtcc cgactacacc gtgaggggcg
 720
 tctctgatct gcagctcatc aagggttacg gactgcagta cctcaatgca ctctggcta
 780
 cccgagccca gaacctgcca cagtcccctg agaacaccga cctgcagggt attccaggca
 840
 gccagaccag gtccttgggt gagaagacca ccacagcggc agctttccca gtagcccttt
 900
 ccctctttgg cacagttgga acctccaggt gataaatgac tgtggactag cgcgcgtttt
 960
 ttgttttcag agcacacgta aggggtccagc cacagcaggc cgggcgtccc ggtggaaggc
 1020
 agccctgggc ggaaccagg cgtttaacgg ctactaggc agccccagat ctggggaagc
 1080
 agatgagcac gtggggagct ggagtgagct gagcagaagt tttgtgcccg cctgccccca
 1140
 tcccctccag gccacgtttt agatggccct ttagttgag ggtcctgggt gtctcagaa
 1200
 ctagacatca atgcctggat ccttcagccg gccctgccct cctttaggag acaggagtca
 1260

ccagggcaca gccctccagg cccgcctcag gaaggaatga aaggaatgcc atcatctcta
 1320
 gttcccaggg cccagccttc cccttctccc ccggggcagg gacagtgcgg catattcaga
 1380
 ttcagacctc tttgggctga gccaccttgt gagtgcagtt actgcctttg tgtggccgtg
 1440
 acctctatctt gtttgctttt aatttgccaa cctatcgctg ctggcagcac tttttgagca
 1500
 agccgagagc acccattttg gctggggatt cagatcgatg gccttgtcca tgttgcctt
 1560
 tctggcttcc ctgatggtgt catgtttcag cgcatgcgcc ccagcctttc ccatgtgcca
 1620
 aaccagaagc tccactgccc gtaggctgtc cctgtagccc tgctccctcc ctggaggctg
 1680
 ctcttctgat tctgagagct ggcctagtgg tgctgagggc ccctttctgc ttctctgccc
 1740
 acctgctgag ttgccactcg cagtgttgtc agttcccgtg ttctgagaag aggtcatgcc
 1800
 tgggaggaag ggatcgtcat gctgcatcga atcctctctc cgcctgtgtg cccccaggag
 1860
 agtagctgcc tgttgacct gctccacacc tccccacagc ctccctgcag gtgctgtgtg
 1920
 gccgtgatgt gcagagagca gtgagggagg gttcatgaac caggtggatc ctctttaaaa
 1980
 aaaaaaaaaag tttttgttat atctctaaaa tcccatagct aggaacagaa aaaaaggaaa
 2040
 agacttgaaa tgttctaga
 2059

<210> 238

<211> 129

<212> PRT

<213> Homo sapiens

<400> 238

Ala	Glu	Gln	Lys	Phe	Cys	Ala	Arg	Leu	Pro	Pro	Ser	Pro	Pro	Gly	His
1				5					10					15	
Val	Leu	Asp	Gly	Pro	Cys	Ser	Cys	Gly	Ser	Trp	Val	Ser	Ser	Glu	Leu
		20						25					30		
Asp	Ile	Asn	Ala	Trp	Ile	Leu	Gln	Pro	Ala	Leu	Pro	Ser	Phe	Arg	Arg
		35					40					45			
Gln	Glu	Ser	Pro	Gly	His	Ser	Pro	Pro	Gly	Pro	Pro	Gln	Glu	Gly	Met
	50					55					60				
Lys	Gly	Met	Pro	Ser	Ser	Leu	Val	Pro	Arg	Ala	Gln	Pro	Ser	Pro	Ser
65					70				75					80	
Pro	Pro	Gly	Gln	Gly	Gln	Cys	Gly	Ile	Phe	Arg	Phe	Arg	Pro	Leu	Trp
			85					90						95	
Ala	Glu	Pro	Pro	Cys	Glu	Cys	Ser	Tyr	Cys	Leu	Cys	Val	Ala	Val	Thr
			100					105					110		
Ser	Ile	Cys	Leu	Leu	Leu	Ile	Cys	Gln	Pro	Ile	Ala	Ala	Gly	Ser	Thr
		115					120					125			

Phe

<210> 239
 <211> 388
 <212> DNA
 <213> Homo sapiens

<400> 239
 ntctagatca ctctgtagcg catgggttaa tgctgacaca atagaaaagt gcgaggacat
 60
 cctcgaatta atgagatggg ggactggatg agtcaagttc tcgtcgttgc ggcggctgtc
 120
 ggtcagctgc cctcctcca cttctgcttc tcggcggttac cccataccgt attggccgcg
 180
 tgttcacctt tgaatgcagc catgtcgtcg tctccgtatc gaaatgatgt gccatcgaag
 240
 atgccgacct cagcatcggc atctgcagtg atgagtgcgt atcgcgccac acgaaaacgcc
 300
 cagcgcaacc gtgtcctcgc acgatacgaa gtgcttgggt atctcagctc tggtacctat
 360
 ggtcgtgtat ataaagcaaa ggaacttn
 388

<210> 240
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 240
 Met Val Asp Trp Met Ser Gln Val Leu Val Val Ala Ala Ala Val Gly
 1 5 10 15
 Gln Leu Pro Leu Leu His Phe Cys Phe Ser Ala Leu Pro His Thr Val
 20 25 30
 Leu Ala Ala Cys Ser Pro Leu Asn Ala Ala Met Ser Ser Ser Pro Tyr
 35 40 45
 Arg Asn Asp Val Pro Ser Lys Met Pro Thr Ser Ala Ser Ala Ser Ala
 50 55 60
 Val Met Ser Ala Tyr Arg Ala Thr Arg Asn Ala Gln Arg Asn Arg Val
 65 70 75 80
 Leu Ala Arg Tyr Glu Val Leu Gly Tyr Leu Ser Ser Gly Thr Tyr Gly
 85 90 95
 Arg Val Tyr Lys Ala Lys Glu Leu
 100

<210> 241
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 241
 ncggggggcc gagttgaaag ctgccggcac actggctgtg ctgcttgctt cacttctcgg
 60
 gatgctgctt ccagggcgagg cctgggggaa acatcggcct tcccaggcac ccttagcccc
 120
 tcccatctgg gggcccttag cacagtcctt gggacccac atgctgcctt tcaggctgat
 180

gtggggcaaac tcggcagccc agcctactcc cggggccatgg gccaccatct cagcttcctt
 240
 ggggctaagc cgtgtgctct gaatcaaaag cagtagtgge atcggcggca ctggcgccat
 300
 gggaaacggg ttgacttgca caaccagcac
 330

<210> 242
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 242
 Met Ala Pro Val Pro Pro Met Pro Leu Leu Leu Leu Ile Gln Ser Thr
 1 5 10 15
 Arg Leu Ser Pro Arg Glu Ala Glu Met Val Ala His Gly Pro Gly Val
 20 25 30
 Gly Trp Ala Ala Glu Phe Ala His Ile Ser Leu Lys Gly Ser Met Trp
 35 40 45
 Gly Pro Arg Asp Cys Ala Lys Gly Pro Gln Met Gly Arg Ala Lys Gly
 50 55 60
 Ala Trp Glu Gly Arg Cys Phe Pro Gln Ala Arg Pro Gly Ser Ser Ile
 65 70 75 80
 Pro Arg Ser Glu Ala Ser Ser Thr Ala Ser Val Pro Ala Ala Phe Asn
 85 90 95
 Ser Ala Pro Arg
 100

<210> 243
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 243
 nnacattctc tccgcgttat taccaaagat gctatgcacg taactgcgga ggaaattctt
 60
 cacacaggcc accccgcccc cactgcgctc gtcgctaate ttccctataa cgttgcggtg
 120
 cccgtactgc tacacatgct agatattctc cctccttgcc ggactacagt ggtgatgggtg
 180
 caggcagaag tagccgatcg attggctgcc acaccaggca gccgcattta cgggtgtcccc
 240
 agcgtcaaag tcaactttta cgggactgtc tcgctgctgg gagcaattgg acgcaatgtc
 300
 ttctggccgg ctccaatgt tgattctggn
 330

<210> 244
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 244
 Xaa Pro Ser Leu Arg Val Ile Thr Lys Asp Ala Met His Val Thr Ala

```

      1           5           10           15
Glu Glu Ile Leu His Thr Gly His Pro Ala Pro Thr Ala Leu Val Ala
      20           25           30
Asn Leu Pro Tyr Asn Val Ala Val Pro Val Leu Leu His Met Leu Asp
      35           40           45
Ile Leu Pro Ser Leu Arg Thr Thr Val Val Met Val Gln Ala Glu Val
      50           55           60
Ala Asp Arg Leu Ala Ala Thr Pro Gly Ser Arg Ile Tyr Gly Val Pro
      65           70           75           80
Ser Val Lys Val Asn Phe Tyr Gly Thr Val Ser Arg Ala Gly Ala Ile
      85           90           95
Gly Arg Asn Val Phe Trp Pro Ala Pro Asn Val Asp Ser Gly
      100           105           110

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<210> 245

<211> 355

<212> DNA

<213> Homo sapiens

<400> 245

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tctagatcct gaatcaccca cctcctagtt tcggattcac ctccgcgggc gtcacctgaa
60
aacaatgtcg agcccgaatg gatgatggta gccacaccca tctcggaaag gtggaatgca
120
gcgtgttgca gaaacagaag ttgaccgtcg gaggtaggcg gcattcgctt cggatcgaag
180
cgtcccgagg catcatctc gagttgacga cgaaaatctt tccagtcac gccgtagggg
240
ganttggcaa ccacagcatc gaatttgctc agaaggaagt ggtcgttggt gagggatttg
300
ccccattcaa tacgcgcac ttcccgaag cgcgcctcta ttgcggccaa cgcgt
355

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<210> 246

<211> 101

<212> PRT

<213> Homo sapiens

<400> 246

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Met Arg Val Leu Asn Gly Ala Ile Pro Ser Pro Thr Thr Thr Ser Phe
      1           5           10           15
Trp Thr Asn Ser Met Leu Trp Leu Pro Xaa Pro Pro Thr Ala Trp Thr
      20           25           30
Gly Lys Ile Phe Val Val Asn Ser Arg Trp Met Pro Arg Asp Ala Ser
      35           40           45
Ile Arg Ser Glu Cys Arg Leu Pro Pro Thr Val Asn Phe Cys Phe Cys
      50           55           60
Asn Thr Leu His Ser Thr Phe Pro Arg Trp Val Trp Leu Pro Ser Ser
      65           70           75           80
Ile Arg Ala Arg His Cys Phe Gln Val Thr Pro Ala Glu Val Asn Pro
      85           90           95
Lys Leu Gly Gly Gly
      100

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<210> 247
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 247
 atggccgcga atgggcaccg tgtcatggtc gtctctcccc gctacgacca gtacaaggac
 60
 gcctgggaca ccagcgtcgt gtccgagatc aagatgggag acaggtacga gacggtcagg
 120
 ttcttccact gctacaagcg cggagtggac cgggtgttcg ttgaccaccc actgttcctg
 180
 gagaggggttt ggggaaagac cgaggagaag atctacgggc ctgacgctgg aacggactac
 240
 agggacaacc agctgcgggt cagcctgcta tgccaggcag cacttgaagc tccaaggatc
 300
 ctgagcctca acaacaaccc atacttctcc gga
 333

<210> 248
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 248
 Met Ala Ala Asn Gly His Arg Val Met Val Val Ser Pro Arg Tyr Asp
 1 5 10 15
 Gln Tyr Lys Asp Ala Trp Asp Thr Ser Val Val Ser Glu Ile Lys Met
 20 25 30
 Gly Asp Arg Tyr Glu Thr Val Arg Phe Phe His Cys Tyr Lys Arg Gly
 35 40 45
 Val Asp Arg Val Phe Val Asp His Pro Leu Phe Leu Glu Arg Val Trp
 50 55 60
 Gly Lys Thr Glu Glu Lys Ile Tyr Gly Pro Asp Ala Gly Thr Asp Tyr
 65 70 75 80
 Arg Asp Asn Gln Leu Arg Phe Ser Leu Leu Cys Gln Ala Ala Leu Glu
 85 90 95
 Ala Pro Arg Ile Leu Ser Leu Asn Asn Asn Pro Tyr Phe Ser Gly
 100 105 110

<210> 249
 <211> 5503
 <212> DNA
 <213> Homo sapiens

<400> 249
 atgaccagg ggattttggc cttggtcacg tccactggct gtgcatctgc caatgccttg
 60
 cagtccctca cggatgccat gcacatccca cacctctttg tccagcgcaa cccgggaggg
 120
 tcgccacgca ccgcatgcca cctgaacccc agccccgatg gtgaggccta cacactggct
 180
 tcgagaccac ccgtccgcct caatgatgtc atgctcaggc tggtgacgga gctgcgctgg
 240

cagaagttcg tcatgttcta cgacagcgag tatgatatcc gtgggcttca aagctttctg
 300
 gaccaggcct cgcggtggg ccttgacgtc tctttacaaa aggtggacaa gaacattagc
 360
 cacgtattca ccagcctgtt caccacgatg aagacagagg agctgaatcg ctaccgggac
 420
 acgcttcgcc gcgccatcct gctgctcagc ccacagggag cccactcctt catcaacgag
 480
 gccgtggaga ccaacctggc ttccaaggac agccactggg tctttgtgaa tgaggaaatc
 540
 agtgacccgg agatcctgga tctgggtccat agtgcccttg gaaggatgac cgtgggtccg
 600
 caaatctttc cgtctgcaaa ggacaatcag aaatgcacga ggaacaacca ccgcatctcc
 660
 tccctgctct gcgaccccca ggaaggctac ctccagatgc tgcagatctc caacctctat
 720
 ctgtatgaca gtgttctgat gctggccaac gcctttcaca ggaagctgga ggaccggaag
 780
 tggcatagca tggcgagcct caactgcata cggaaatcca ctaagccatg gaatggtggg
 840
 aggtccatgc tggataccat caaaaagggc cacatcactg gcctcactgg ggtgatggag
 900
 ttctgggagg acagttcgaa tccctatgtc cagtttgaaa tccttggcac tacctatagt
 960
 gagacttttg gcaaagacat gcgcaagttg gcgacatggg actcagagaa gggcttgaat
 1020
 ggcagcttgc aagagaggcc catgggcagc cgctccaag gattgactct taaagtgggt
 1080
 actgtcttgg aagagccttt cgtgatggtg gctgagaaca tcctaggaca gccaagcgc
 1140
 tacaaagggt tctccataga tgtcctggat gcaactggcca aggcctctggg ctttaaatat
 1200
 gagatttacc aagccctga tggcaggtag ggtcaccagc tccataacac ctcttggaac
 1260
 gggatgatcg gggagctcat cagcaagaga gcagacttgg ccatctctgc catcaccatc
 1320
 accccagaga gggagagcgt tgtggacttc agcaagcggc acatggacta ttcagtgggg
 1380
 attctaatta agaagcccgga ggagaaaatc agcatcttct ccctctttgc tccatttgat
 1440
 ttcgctgtgt gggcctgcat tgcagcagcc atccctgtgg ttggtgtgct gatatttgtg
 1500
 ttgaacagga tacaggctgt gagggctcag agtgctgccc agcccaggcc gtcagcttct
 1560
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 1620
 tcttccgtga actccatggc catgcgcacg gtgatgggca gctggtggct cttcacgctc
 1680
 attgtgtgct cctcctacac agccaacctt gctgccttcc tcacagtgtc caggatggac
 1740
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<210> 250

<211> 927

<212> PRT

<213> Homo sapiens

<400> 250

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		20						25					30		
Phe	Val	Gln	Arg	Asn	Pro	Gly	Gly	Ser	Pro	Arg	Thr	Ala	Cys	His	Leu
	35						40					45			
Asn	Pro	Ser	Pro	Asp	Gly	Glu	Ala	Tyr	Thr	Leu	Ala	Ser	Arg	Pro	Pro
	50				55						60				
Val	Arg	Leu	Asn	Asp	Val	Met	Leu	Arg	Leu	Val	Thr	Glu	Leu	Arg	Trp
65				70					75					80	
Gln	Lys	Phe	Val	Met	Phe	Tyr	Asp	Ser	Glu	Tyr	Asp	Ile	Arg	Gly	Leu
			85					90						95	
Gln	Ser	Phe	Leu	Asp	Gln	Ala	Ser	Arg	Leu	Gly	Leu	Asp	Val	Ser	Leu
			100					105					110		
Gln	Lys	Val	Asp	Lys	Asn	Ile	Ser	His	Val	Phe	Thr	Ser	Leu	Phe	Thr
	115						120					125			
Thr	Met	Lys	Thr	Glu	Glu	Leu	Asn	Arg	Tyr	Arg	Asp	Thr	Leu	Arg	Arg
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	180						185					190			
Leu	Gly	Arg	Met	Thr	Val	Val	Arg	Gln	Ile	Phe	Pro	Ser	Ala	Lys	Asp
	195						200					205			
Asn	Gln	Lys	Cys	Thr	Arg	Asn	Asn	His	Arg	Ile	Ser	Ser	Leu	Leu	Cys
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225				230					235					240	
Leu	Tyr	Asp	Ser	Val	Leu	Met	Leu	Ala	Asn	Ala	Phe	His	Arg	Lys	Leu
			245					250						255	
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705	710	715
Lys Trp Trp Pro His Met Gly Arg Cys Asp Leu Thr Ser His Ala Ser		
	725	730
Ala Gln Ala Asp Gly Lys Ser Leu Lys Leu His Ser Phe Ala Gly Val		
	740	745
Phe Cys Ile Leu Ala Ile Gly Leu Leu Leu Ala Cys Leu Val Ala Ala		
	755	760
Leu Glu Leu Trp Trp Asn Ser Asn Arg Cys His Gln Glu Thr Pro Lys		
	770	775
Glu Asp Lys Glu Val Asn Leu Glu Gln Val His Arg Arg Met Asn Ser		
785	790	795
Leu Met Asp Glu Asp Ile Ala His Lys Gln Ile Ser Pro Ala Ser Ile		
	805	810
Glu Leu Ser Ala Leu Glu Met Gly Gly Leu Ala Pro Thr Gln Thr Leu		
	820	825
Glu Pro Thr Arg Glu Tyr Gln Asn Thr Gln Leu Ser Val Ser Thr Phe		
	835	840
Leu Pro Glu Gln Ser Ser His Gly Thr Ser Arg Thr Leu Ser Ser Gly		
	850	855
Pro Ser Ser Asn Leu Pro Leu Pro Leu Ser Ser Ser Ala Thr Met Pro		
865	870	875
Ser Met Gln Cys Lys His Arg Ser Pro Asn Gly Gly Leu Phe Arg Gln		
	885	890
Ser Pro Val Lys Thr Pro Ile Pro Met Ser Phe Gln Pro Val Pro Gly		
	900	905
Gly Val Leu Pro Glu Ala Leu Asp Thr Ser His Gly Thr Ser Ile		
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<210> 251
 <211> 291
 <212> DNA
 <213> Homo sapiens

<400> 251
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 120
 gattaccacc attcggtgac cctgctgctg cgggtgcgcg ggaactcacc tctggaacga
 180
 gaggccctcg agggccgcg ccgtatcgat gcgaaggttc ccgtctctgt cgagagcgcc
 240
 atgcgcgagg gtggtctgcg ctcggttttc actcccgggc tcatcacgcg t
 291

<210> 252
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 252
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Ser Leu Arg Glu Asp Val Asn Ala Leu Glu Arg Leu Arg Leu Ala Val
      20           25           30
Arg Ala Ser Val Val Ile Leu Ile Glu Tyr His His Ser Val Thr Leu
      35           40           45
Leu Leu Arg Val Arg Gly Asn Ser Pro Leu Glu Arg Glu Ala Leu Glu
      50           55           60
Ala Arg Arg Arg Ile Asp Ala Lys Val Pro Ala Leu Val Glu Ser Ala
      65           70           75           80
Ile Ala Glu Gly Gly Leu Arg Ser Asp Phe Thr Pro Gly Leu Ile Thr
      85           90           95
Arg

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<210> 253
 <211> 327
 <212> DNA
 <213> Homo sapiens

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<400> 253
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120
cccacatgtc ggcagtgatg gcgggcacct tgcgggagaa ggccgggaag gtcgagcgag
180
ccaatgaccg tcgcacggtc ggcacgctcc acgagcggga cgagaagctc gcggcaggac
240
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300
acgacttcgg acggcgactc gacgcgt
327

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<210> 254
 <211> 106
 <212> PRT
 <213> Homo sapiens

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<400> 254
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Arg Ala Leu Thr Val Leu Tyr Arg Pro Ile Ser Gln Pro Ser Ala Asp
      20           25           30
Arg Ser Thr Asn Arg Ala His Met Ser Ala Val Met Ala Gly Thr Leu
      35           40           45
Arg Glu Lys Ala Gly Lys Val Glu Arg Ala Asn Asp Arg Arg Thr Val
      50           55           60
Gly Thr Leu His Glu Arg Asp Glu Lys Leu Ala Ala Gly Arg Ser Leu
      65           70           75           80
Val Ala Val Ser Ser Ala Val Ser Ile Thr Val Pro Ala Thr Trp Asn
      85           90           95
Ala His Asp Phe Gly Arg Arg Leu Asp Ala
      100           105

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<210> 255
 <211> 372
 <212> DNA
 <213> Homo sapiens

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 120
 atcgagctaa ctcgtcgctt aaagaaagac agcacgacag cagaaatccc tgttatttta
 180
 ctaacggcca aaagtgaaga agacaataaa attcaaggct tagaagtcgg tgcagatgac
 240
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 360
 attagccaac gc
 372

<210> 256
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 256
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 Ala His Glu Ile Ile Val Asp His Arg Pro Asp Leu Ile Leu Cys Asp
 20 25 30
 Trp Met Met Pro Gly Gly Ser Gly Ile Glu Leu Thr Arg Arg Leu Lys
 35 40 45
 Lys Asp Ser Thr Thr Ala Glu Ile Pro Val Ile Leu Leu Thr Ala Lys
 50 55 60
 Ser Glu Glu Asp Asn Lys Ile Gln Gly Leu Glu Val Gly Ala Asp Asp
 65 70 75 80
 Tyr Ile Thr Lys Pro Phe Ser Pro Arg Glu Leu Val Ala Arg Leu Lys
 85 90 95
 Ala Val Leu Arg Arg Ala Thr Pro Gln Gly Ile Asp Asp Pro Ile Glu
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 Ile Asp Gly Leu Thr Leu Asp Pro Ile Ser Gln Arg
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<210> 257
 <211> 639
 <212> DNA
 <213> Homo sapiens

<400> 257
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 240
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<210> 258

<211> 213

<212> PRT

<213> Homo sapiens

<400> 258

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			20					25					30		
Met	Cys	Ala	Gln	Val	Leu	Ala	Glu	Arg	Phe	Gly	Leu	Gly	Gly	Ile	Phe
		35						40					45		
Phe	Gly	Leu	Pro	Thr	Met	Ala	Thr	Ser	Asn	Pro	Met	Phe	Gly	Arg	Val
		50					55				60				
Arg	Glu	Trp	Leu	Asp	Ala	Val	Pro	Ala	Lys	Asp	Pro	Ser	Ser	Ile	Ser
					70					75					80
Leu	Ala	His	Ser	Lys	Ala	Gly	Leu	Asn	Glu	Glu	Tyr	Gln	Gln	Leu	Met
				85					90					95	
Pro	Trp	Asn	Ala	Thr	Met	Ala	Val	Tyr	Asp	Glu	Gly	Ala	Gly	Thr	Gln
		100						105					110		
Arg	Glu	Ala	Ser	Ala	Ile	Val	His	Glu	Trp	Phe	Leu	Gly	Arg	Lys	Arg
		115					120					125			
Ala	Ile	Leu	Ala	Asp	His	Val	Val	Gly	Thr	Ile	Asp	Gln	Ala	Leu	Phe
		130				135					140				
Thr	Gly	Leu	Lys	Ala	Lys	His	Val	Val	Leu	Arg	His	Leu	Gly	Leu	Ala
				150					155					160	
Ser	Lys	Val	Val	Ile	Ile	Asp	Glu	Val	His	Ala	Ala	Asp	Val	Tyr	Met
				165					170					175	
Arg	Glu	Tyr	Leu	Lys	Val	Val	Leu	Glu	Trp	Leu	Gly	Ala	Tyr	Arg	Thr
			180					185				190			
Pro	Val	Ile	Leu	Met	Ser	Ala	Thr	Leu	Pro	Pro	Ala	Gln	Arg	His	Glu
		195					200					205			
Leu	Ala	Leu	Ala	Tyr											
				210											

<210> 259
 <211> 252
 <212> DNA
 <213> Homo sapiens

<400> 259
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 240
 atgcaatggt gt
 252

<210> 260
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 260
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 20 25 30
 Val Met Cys Thr Cys Ala Xaa Val Cys Xaa Cys Val Cys Met Xaa Val
 35 40 45
 Cys Thr Cys Ala Leu Xaa Cys Gly Val Tyr Ala Trp Cys Val His Met
 50 55 60
 Ser Thr Val Trp Cys Val Cys Met Val Xaa Cys Thr Cys Ala Leu Cys
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 Met Gln Trp Cys

<210> 261
 <211> 1202
 <212> DNA
 <213> Homo sapiens

<400> 261
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 360

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 420
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 540
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 600
 aacgcgactg cccggttgat tgcggcgaag ggggttaagc gatgagcgcc accaccctg
 660
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 780
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 960
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 1020
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 1080
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<210> 262

<211> 214

<212> PRT

<213> Homo sapiens

<400> 262

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Ile	Val	Phe	Gly	Leu	Trp	Gly	Gly	Ile	Val	Phe	Gly	Ser	Ser	Gly	Ile
		20					25					30			
Ile	Asn	Gly	Tyr	Ala	Gly	Ala	Leu	Phe	Lys	Ala	Leu	Gly	Trp	Ile	Pro
	35					40					45				
Ile	Phe	Ser	Glu	Asp	Pro	Ser	Trp	Ser	Ser	Ala	Thr	Gly	Thr	Val	Tyr
	50				55					60					
Leu	Ala	Ser	Leu	Val	Leu	Ala	Ile	Met	Ile	Leu	Pro	Ile	Ile	Thr	Ala
65				70					75					80	
Val	Ser	Arg	Asp	Val	Met	Pro	Arg	Thr	Pro	His	Asp	Gln	Val	Glu	Ala
		85				90						95			
Ala	Leu	Ala	Leu	Gly	Ser	Thr	Arg	Trp	Glu	Val	Ile	Lys	Leu	Ala	Val
		100				105						110			
Phe	Pro	His	Ser	Arg	Ser	Gly	Ile	Ile	Ser	Gly	Ser	Met	Leu	Gly	Leu
	115					120						125			
Gly	Arg	Ala	Leu	Gly	Glu	Thr	Leu	Ala	Val	Thr	Leu	Ile	Leu	Gln	Thr

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145              150              155              160
Gly Gly Glu Thr Phe Ala Ser Lys Ile Ala Gly Asn Phe Ser Glu Ala
      165              170              175
Ile Ser Asp Pro Thr Ser Leu Gly Ala Leu Val Ala Ser Ala Leu Ala
      180              185              190
Leu Phe Val Ile Thr Phe Val Val Asn Ala Thr Ala Arg Leu Ile Ala
      195              200              205
Ala Lys Gly Val Lys Arg
      210

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<210> 263
<211> 424
<212> DNA
<213> Homo sapiens

```

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<400> 263
acgcgtgagt gctctgcgct ggaaacaacg gtgatagagc ccatccgccg tgaactttcc
60
gacgtggtgc tcgtgaacaa gctcgaaaag tatgtacgcg aacgtacctc ggaagacggt
120
gcgcacatgg aagaggatgc ggaccagacg ggcaacgaca tcttcacgac gatcctgctg
180
tcgaactggg atccactatt ggatatgacg acgcaggatc atgtgctggc catgcaaaag
240
gcttatatgg cctcgccatt ccgtgccaat ttggacctgg catacccatc ttcgacgcca
300
caggcccagt cccagccggc gatgccgccg tgggagacag ggacctcagc cagtagcatg
360
gcggatgctc gtgaatttgc gctgctgaag ctgtacctgc gtagcttgct gcagaagcac
420
gann
424

```

```

<210> 264
<211> 99
<212> PRT
<213> Homo sapiens

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```

<400> 264
Met Glu Glu Asp Ala Asp Gln Thr Gly Asn Asp Ile Leu Thr Thr Ile
1      5      10      15
Leu Leu Ser Asn Trp Asp Pro Leu Leu Asp Met Thr Thr Gln Asp His
      20      25      30
Val Leu Ala Met Gln Lys Ala Tyr Met Ala Ser Pro Phe Arg Ala Asn
      35      40      45
Leu Asp Leu Ala Tyr Pro Ser Ser Thr Pro Gln Ala Gln Ser Gln Pro
      50      55      60
Ala Met Pro Pro Trp Glu Thr Gly Thr Ser Ala Ser Ser Met Ala Asp
      65      70      75      80
Ala Arg Glu Phe Ala Leu Leu Lys Leu Tyr Leu Arg Ser Leu Leu Gln
      85      90      95
Lys His Xaa

```

<210> 265
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 265
 ncgtacggcc ctggcggtccg catggacgag ggataccatt ccggcatgac ggtgccgggt
 60
 gccttcgact ccctcatcgg caagctcatc atcactggtg atagccgtga gcaagccctg
 120
 gctcgagctg cccgcgcct cgacgaaatc gtcacgacg gcatgccgac ggtcattccc
 180
 ttaccagg cgggtggttca cgaccgggt ttcactgccg ccgacgggtg cttcggcgtc
 240
 ttaccgact ggatcgaaac cgagttcgac aacaagatcg agccatacac cgggtctctg
 300
 ggcgagtctg ccaattccga gcctcctcgt gaggtcgtcg tcgaggtcaa cggtaaacgc
 360

<210> 266
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 266
 Xaa Tyr Gly Pro Gly Val Arg Met Asp Glu Gly Tyr His Ser Gly Met
 1 5 10 15
 Thr Val Pro Gly Ala Phe Asp Ser Leu Ile Gly Lys Leu Ile Ile Thr
 20 25 30
 Gly Asp Ser Arg Glu Gln Ala Leu Ala Arg Ala Ala Arg Ala Leu Asp
 35 40 45
 Glu Ile Val Ile Asp Gly Met Pro Thr Val Ile Pro Phe His Gln Ala
 50 55 60
 Val Val His Asp Pro Ala Phe Thr Ala Ala Asp Gly Cys Phe Gly Val
 65 70 75 80
 Phe Thr Asp Trp Ile Glu Thr Glu Phe Asp Asn Lys Ile Glu Pro Tyr
 85 90 95
 Thr Gly Ser Leu Gly Glu Ser Ala Asn Ser Glu Pro Pro Arg Glu Val
 100 105 110
 Val Val Glu Val Asn Gly Lys Arg
 115 120

<210> 267
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 267
 natcctcaac gtgtgttcag ttccacgcga aagatcatgt tcgtcatcgg atcgatgccg
 60
 ttaacgcata ctagtcaatc caccgatggc gaccctggca aaaaatacga ggtgacttgg
 120

ctagatctcg ggcaccttca ccctagtcgg cgggactcg tcactatcac cacaactgtc
 180
 gatgatgacg tcatcacctc ttcccaggta aatgtcggca acctccaccg cggggatgaa
 240
 aaacttttctg aagctcgcga ttaccgccag attccgatgc ttgcatcacg tcatggctgg
 300
 acagctccat tcattggtga gaccggcgca gcccatgcc a tcaggatgc gatgggcatt
 360
 accatcccaa ctgcgtggc atggatacga accctgctcg ctgagttcag cagaatcacc
 420
 tcacacttca catttttgtc atgggtaggc catcactgtg atgatgccg c
 471

<210> 268
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 268
 Xaa Pro Gln Arg Val Phe Ser Ser Thr Arg Lys Ile Met Phe Val Ile
 1 5 10 15
 Gly Ser Met Pro Leu Thr His Pro Ser Gln Ser Thr Asp Gly Asp Pro
 20 25 30
 Gly Lys Lys Tyr Glu Val Thr Trp Leu Asp Leu Gly His Leu His Pro
 35 40 45
 Ser Arg Pro Gly Leu Val Thr Ile Thr Thr Val Asp Asp Asp Val
 50 55 60
 Ile Thr Ser Ser Gln Val Asn Val Gly Asn Leu His Arg Gly Asp Glu
 65 70 75 80
 Lys Leu Phe Glu Ala Arg Asp Tyr Arg Gln Ile Pro Met Leu Ala Ser
 85 90 95
 Arg His Gly Trp Thr Ala Pro Phe Ile Gly Glu Thr Gly Ala Ala His
 100 105 110
 Ala Ile Glu Asp Ala Met Gly Ile Thr Ile Pro Thr Arg Val Ala Trp
 115 120 125
 Ile Arg Thr Leu Leu Ala Glu Phe Ser Arg Ile Thr Ser His Phe Thr
 130 135 140
 Phe Leu Ser Trp Val Gly His His Cys Asp Asp Ala Gly
 145 150 155

<210> 269
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 269
 acgcgtgtcg tgtttccaga aaaaaccaat aaattagagt ttatggtaga agtgattgct
 60
 gatatgacgg taatcaatcc atttgatttc tttgtggaaa gctacgcaga agactaccca
 120
 tttgcttatg acaaagctct taaaaaagag ttagaacctt atttacaggt ttctgaacct
 180
 tgttcgttac tcgacaaatg gctgtctggt gttgatcgtg aaaaaacacc gatcaatgat
 240

tttctagtcg caataaacag tcgccttgcc ggtgatattg gctatgggtat tcgcttagaa
 300
 ccgggcgttc agtcacctga agaaacgctc acattaatga aaggctcttg tcgcgatacc
 360
 tcgggggttat tggttcaaact actacgc
 387

<210> 270
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 270
 Thr Arg Val Val Phe Pro Glu Lys Thr Asn Lys Leu Glu Phe Met Val
 1 5 10 15
 Glu Val Ile Ala Asp Met Thr Val Ile Asn Pro Phe Asp Phe Phe Val
 20 25 30
 Glu Ser Tyr Ala Glu Asp Tyr Pro Phe Ala Tyr Asp Lys Ala Leu Lys
 35 40 45
 Lys Glu Leu Glu Pro Tyr Leu Gln Val Ser Glu Pro Cys Ser Leu Leu
 50 55 60
 Asp Lys Trp Leu Ser Gly Val Asp Arg Glu Lys Thr Pro Ile Asn Asp
 65 70 75 80
 Phe Leu Val Ala Ile Asn Ser Arg Leu Ala Gly Asp Ile Gly Tyr Gly
 85 90 95
 Ile Arg Leu Glu Pro Gly Val Gln Ser Pro Glu Glu Thr Leu Thr Leu
 100 105 110
 Met Lys Gly Ser Cys Arg Asp Thr Ser Gly Leu Leu Val Gln Ile Leu
 115 120 125
 Arg

<210> 271
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 271
 gccggcacca acggaaagtc ctctaccgcg cgcattggctg attcgctttt gcgtgccttc
 60
 caccgccgag tgggttttggg aaccagccca cacctgcagc gcgttactga gcgcacgggc
 120
 attgatggcc agcccattca cccgcgcgat tatgtacgca tctggcacga gattaagcca
 180
 tttgtggaaa tggtcgatgc cgaatcggac gtgcctatgt ctaagttcga ggtcttcgtg
 240
 ggctgtcct atgctgcgtt tgccgacgcc cccggggacg tcgctgtcgt cgaagtcggc
 300
 cttggcggac gttgggacgc taccaatgtg gtcaacgcgg atgtctctgt cattaccccg
 360
 gtgggcatgg accacacgga ttacctgggg gagacgatca ctgaaatcgc aggcgagaaa
 420
 gctggcatta ttaagccacg cgt
 443

<210> 272
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 272
 Ala Gly Thr Asn Gly Lys Ser Ser Thr Ala Arg Met Val Asp Ser Leu
 1 5 10 15
 Leu Arg Ala Phe His Arg Arg Val Gly Leu Val Thr Ser Pro His Leu
 20 25 30
 Gln Arg Val Thr Glu Arg Ile Gly Ile Asp Gly Gln Pro Ile His Pro
 35 40 45
 Arg Asp Tyr Val Arg Ile Trp His Glu Ile Lys Pro Phe Val Glu Met
 50 55 60
 Val Asp Ala Glu Ser Asp Val Pro Met Ser Lys Phe Glu Val Phe Val
 65 70 75 80
 Gly Leu Ser Tyr Ala Ala Phe Ala Asp Ala Pro Gly Asp Val Ala Val
 85 90 95
 Val Glu Val Gly Leu Gly Gly Arg Trp Asp Ala Thr Asn Val Val Asn
 100 105 110
 Ala Asp Val Ser Val Ile Thr Pro Val Gly Met Asp His Thr Asp Tyr
 115 120 125
 Leu Gly Glu Thr Ile Thr Glu Ile Ala Gly Glu Lys Ala Gly Ile Ile
 130 135 140
 Lys Pro Arg
 145

<210> 273
 <211> 864
 <212> DNA
 <213> Homo sapiens

<400> 273
 caaagtaaga ctgcttcaaa ttttgtgttc tgctctgcag ctgctcccc cctgctgtcg
 60
 aagagaagcc aaagcccccc cccccacct caaaggctcg gaagtctggc atccctactt
 120
 ccgagcctgg atcccagtaa ggatcttgcc ctccctgcaa caccgagtgc cttagacagc
 180
 tgctgcctga gaactggcct ccagccggtg tcctcattcc atggggctcc ctgctgactg
 240
 catttctga tctgggatga tgtttaccag cccaaaacca gtcattgtct tccaaaagct
 300
 tctctttgat agaattttga ggccatgcc cctcccttcc agtcacatg gaattccaga
 360
 atcagtcaca gcctctgatt ttttccaaga agagattgcc ttcaccattg ttaaattgtca
 420
 gcctgtacgg cagagacatg gtggtctgca caagcctgga caagttcttc catattgatg
 480
 gtgggagcaa ccctgtaat ctactccttg gaaggathtt ttgctttgct tatgaaaagc
 540
 tgtgcttgag acttaggtac ttttctcacg tggacacact gatcccatcc catattgcat
 600

ctttgaagag atggatatca agtacacttt ggtagctgaa ataatcatat ctttctgatg
 660
 tctattgtat ctcctttgag gaaaagaaca cacattttta atggagattg gctgctttca
 720
 ggtatgtgtg tctatcattg aaagagcatg gactcaaaca tcagccctga gttcttgagt
 780
 ccaccaact cccatcttct tgtggcacag gaaagctgcc ctctccctct cccaccacac
 840
 tcctgactaa tgcccttcac gcgt
 864

<210> 274

<211> 116

<212> PRT

<213> Homo sapiens

<400> 274

Met	Trp	Thr	Gly	Arg	Glu	Val	Ala	Trp	Pro	Gln	Asn	Ser	Ile	Lys	Glu
1				5					10					15	
Lys	Leu	Leu	Glu	Glu	His	Asp	Trp	Phe	Trp	Ala	Gly	Lys	His	His	Pro
			20					25					30		
Arg	Ser	Gly	Asn	Ala	Val	Ser	Arg	Glu	Pro	His	Gly	Met	Arg	Thr	Pro
		35				40						45			
Ala	Gly	Gly	Gln	Phe	Ser	Gly	Ser	Ser	Cys	Leu	Arg	His	Ser	Val	Leu
	50					55					60				
Gln	Gly	Gly	Gln	Asp	Pro	Tyr	Trp	Asp	Pro	Gly	Ser	Glu	Val	Gly	Met
65					70					75				80	
Pro	Asp	Phe	Arg	Ala	Phe	Glu	Val	Gly	Gly	Gly	Gly	Phe	Gly	Phe	Ser
			85					90					95		
Ser	Thr	Ala	Gly	Gly	Ser	Glu	Leu	Gln	Ser	Arg	Thr	Gln	Asn	Leu	Lys
			100					105					110		
Gln	Ser	Tyr	Phe												
			115												

<210> 275

<211> 911

<212> DNA

<213> Homo sapiens

<400> 275

naaatttaaa ggaacctccc ttctataacg gagagtattt attgcagctt tcctttctgt
 60
 ttattttcag gaatgaaagg aattaccacag ccttctgctt ttatacctac agctgaaagt
 120
 aattcctttc agcctcaggt gaagactttg ccattctccaa ttgatgctaa acagcagttg
 180
 caacggaaaa tccagaagaa gcagcaagaa cagaaactac aatccccctt gccaggagaa
 240
 tctgcagcaa aaaagtcaga aagtgtctaca agcaatggag tgactaatct tcctaattgga
 300
 aatccttcaa tcctttctcc tcaacctatt ggtatcgttg tggcagctgt ccctagtcct
 360
 attccggtcc agcggactag gcaattggta acttcaccga gtccaatgag ttcttctnga
 420

cggcaaagtt cttccctca atgtacaggt ggtcactcag cacatgcagt ctgtgaaaca
 480
 ggcaccaaag actccccaga acgttccagc agtcctggtg ggaatcggtc tgcccggcac
 540
 cgttaccctc agatettacc caaaccagcg aacaccagtg cactcaccat tcgctctcca
 600
 actactgtcc tctttactag tagtcccatc aaaactgctg ttgtaccgc ttcacacatg
 660
 agttctctaa atgtggtgaa aatgacaaca atatccctca caccagcaa cagtaacacc
 720
 cctcttaaac attctgcctc agtcagcagt gctacaggaa caacagaaga atcaaggagt
 780
 gttccacaga tcaagaatgg ttctgtcgtg tcgcttcagt ctcctgggtc caggagcagc
 840
 agtgcggggg gaacatctgc tgtggaagtc aaagtggaac ccgaaacatc atcagatgag
 900
 catcctgtac a
 911

<210> 276

<211> 279

<212> PRT

<213> Homo sapiens

<400> 276

Met	Lys	Gly	Ile	Thr	Gln	Pro	Ser	Ala	Phe	Ile	Pro	Thr	Ala	Glu	Ser
1				5					10					15	
Asn	Ser	Phe	Gln	Pro	Gln	Val	Lys	Thr	Leu	Pro	Ser	Pro	Ile	Asp	Ala
			20					25					30		
Lys	Gln	Gln	Leu	Gln	Arg	Lys	Ile	Gln	Lys	Lys	Gln	Gln	Glu	Gln	Lys
			35				40					45			
Leu	Gln	Ser	Pro	Leu	Pro	Gly	Glu	Ser	Ala	Ala	Lys	Lys	Ser	Glu	Ser
			50				55					60			
Ala	Thr	Ser	Asn	Gly	Val	Thr	Asn	Leu	Pro	Asn	Gly	Asn	Pro	Ser	Ile
65					70					75				80	
Leu	Ser	Pro	Gln	Pro	Ile	Gly	Ile	Val	Val	Ala	Ala	Val	Pro	Ser	Pro
				85					90					95	
Ile	Pro	Val	Gln	Arg	Thr	Arg	Gln	Leu	Val	Thr	Ser	Pro	Ser	Pro	Met
			100					105					110		
Ser	Ser	Ser	Xaa	Arg	Gln	Ser	Ser	Ser	Pro	Gln	Cys	Thr	Gly	Gly	His
			115				120					125			
Ser	Ala	His	Ala	Val	Cys	Glu	Thr	Gly	Thr	Lys	Asp	Ser	Pro	Glu	Arg
			130				135				140				
Ser	Ser	Ser	Pro	Gly	Gly	Asn	Arg	Ser	Ala	Arg	His	Arg	Tyr	Pro	Gln
145					150					155				160	
Ile	Leu	Pro	Lys	Pro	Ala	Asn	Thr	Ser	Ala	Leu	Thr	Ile	Arg	Ser	Pro
				165					170					175	
Thr	Thr	Val	Leu	Phe	Thr	Ser	Ser	Pro	Ile	Lys	Thr	Ala	Val	Val	Pro
			180					185					190		
Ala	Ser	His	Met	Ser	Ser	Leu	Asn	Val	Val	Lys	Met	Thr	Thr	Ile	Ser
			195				200					205			
Leu	Thr	Pro	Ser	Asn	Ser	Asn	Thr	Pro	Leu	Lys	His	Ser	Ala	Ser	Val
			210				215				220				
Ser	Ser	Ala	Thr	Gly	Thr	Thr	Glu	Glu	Ser	Arg	Ser	Val	Pro	Gln	Ile


```

225          230          235          240
Lys Asn Gly Ser Val Val Ser Leu Gln Ser Pro Gly Ser Arg Ser Ser
          245          250          255
Ser Ala Gly Gly Thr Ser Ala Val Glu Val Lys Val Glu Pro Glu Thr
          260          265          270
Ser Ser Asp Glu His Pro Val
          275

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```

<210> 277
<211> 652
<212> DNA
<213> Homo sapiens

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```

<400> 277
nnaccggtgg ggactctcgc tgaggtcctt aatggccctt ctcgtgtccc ggacggcacc
60
atgaaccttg ttggtgggct gcgtcaggca atggccacca ctggttactc ggaggtcaaa
120
gagttccagc gcacgcagct gacgattcgc taaccgttcc accacgcaga atggtgttcc
180
ggtgagcggg tggatagcta gccttcggcc atgagtgaag tgcccgatga attggtcgtg
240
ttgcgtggcg cgattgacaa catggacgcc gccctcatcc atctgcttgc cgaaagggtc
300
cggattactc gcgaggtagg ccgcctcaag gcggagtgcg gtttacctcc ggccgacccc
360
gcccgtagg ctgagcagat cgcgcggttg cggcagttag cggtcgagtc gaacctcgac
420
cccgaattcg cgcagaaggt catcacgttc atcgtggccg aggtggtgcg tcaccacgaa
480
gctattgctg acgattctgg cgacgactct ggagtggcgg atacggggga ggcggatgct
540
cctgggtcgg gcagctgagt tacagatcag gcgatgacgt cgccttggtg caccttcgac
600
gggattccga cgacgactgt gccgggggog acatccttga cgaccaacgc gt
652

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<210> 278
<211> 115
<212> PRT
<213> Homo sapiens

```

```

<400> 278
Met Ser Glu Val Pro Asp Glu Leu Val Val Leu Arg Gly Ala Ile Asp
1          5          10          15
Asn Met Asp Ala Ala Leu Ile His Leu Leu Ala Glu Arg Phe Arg Ile
          20          25          30
Thr Arg Glu Val Gly Arg Leu Lys Ala Glu Cys Gly Leu Pro Pro Ala
          35          40          45
Asp Pro Ala Arg Glu Ala Glu Gln Ile Ala Arg Leu Arg Gln Leu Ala
          50          55          60
Val Glu Ser Asn Leu Asp Pro Glu Phe Ala Gln Lys Val Ile Thr Phe
65          70          75          80
Ile Val Ala Glu Val Val Arg His His Glu Ala Ile Ala Asp Asp Ser

```

85 90 95
 Gly Asp Asp Ser Gly Val Ala Asp Thr Gly Glu Ala Asp Val Pro Gly
 100 105 110
 Ser Gly Ser
 115

<210> 279
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 279
 cgggagggtca cacaagcatt caaaccatag cagatggtaa atgttatggt atgtgtatatt
 60
 taccacaatc cttaaaaaga aaagaaagaa aggcataatgg aacccttagt tacctctcat
 120
 ccagcttcaa aattgtcagt gcattgggtcaa tcttgtctta tctgcccctc acccaccctt
 180
 ttccagaaag aagaccaga ggattccaca tctgcctgga aaccacgacc agtctogact
 240
 ggaagtgtgt gttaatgttg catgtattca taaaacctct aggcatttct agtgtccctc
 300
 agaatttttc caaattcagg caaacacaga aattacttcc aaaaattt
 348

<210> 280
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 280
 Met Cys Ile Leu Pro Gln Ser Leu Lys Arg Lys Glu Arg Lys Ala Tyr
 1 5 10 15
 Gly Thr Pro Ser Tyr Leu Ser Ser Ser Phe Lys Ile Val Ser Ala Trp
 20 25 30
 Ser Ile Leu Ser Tyr Leu Pro Leu Thr His Pro Phe Pro Glu Arg Arg
 35 40 45
 Pro Arg Gly Phe His Ile Cys Leu Glu Thr Thr Thr Ser Leu Asp Trp
 50 55 60
 Lys Leu Leu Leu Met Leu His Val Phe Ile Lys Pro Leu Gly Ile Ser
 65 70 75 80
 Ser Val Pro Gln Asn Phe Ser Lys Phe Arg Gln Thr Gln Lys Leu Leu
 85 90 95
 Pro Lys Ile

<210> 281
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 281
 agatctgcgc agatcgataa tggattaaag actcttgacg ctggagtcac cgagatgaac
 60

aacaaggtgt tgggggcaac gaaggtgtc ggtgattcca ccactaccgt caaccaggtg
120
aattctgcgt taggaantgc cgactcagcg gcagagaaga cgtcgagcgc cgttactcag
180
acgcgcgtgg gtgcccaggc gattaccggc gctgctcaaa atgtcatggc tgattcccaa
240
gctgtcaact cagccatggg tccgcttatt aataacgtga caaagaatct tcctaccttg
300
caaaaacagg ccaggaatct cgtgtcagtg aacggtaccc tgcagaaccc caacggtgat
360
tctgtcatta agattcaaca gacc
384

<210> 282

<211> 110

<212> PRT

<213> Homo sapiens

<400> 282

Met	Asn	Asn	Lys	Val	Leu	Gly	Ala	Thr	Lys	Ala	Val	Gly	Asp	Ser	Thr
1				5				10						15	
Thr	Thr	Val	Asn	Gln	Val	Asn	Ser	Ala	Leu	Gly	Xaa	Ala	Asp	Ser	Ala
		20					25						30		
Ala	Glu	Lys	Thr	Ser	Ser	Ala	Val	Thr	Gln	Thr	Arg	Val	Gly	Ala	Gln
	35						40					45			
Ala	Ile	Thr	Gly	Ala	Ala	Gln	Asn	Val	Met	Ala	Asp	Ser	Gln	Ala	Val
	50					55					60				
Asn	Ser	Ala	Met	Val	Pro	Leu	Ile	Asn	Asn	Val	Thr	Lys	Asn	Leu	Pro
65				70					75					80	
Thr	Leu	Gln	Lys	Gln	Ala	Arg	Asn	Leu	Val	Ser	Val	Asn	Gly	Thr	Leu
			85				90							95	
Gln	Asn	Pro	Asn	Gly	Asp	Ser	Val	Ile	Lys	Ile	Gln	Gln	Thr		
			100					105					110		

<210> 283

<211> 426

<212> DNA

<213> Homo sapiens

<400> 283

cgcgtagacc aatgtgagac ggccgtcacc aagggcacgc gcgacaagtc ggttggttagc
60
ggaccggata ttgtgcgtcg cgagctgcgc catgtcgtga cgagcggcac gattgtcgat
120
ggaagcgtac tggctgacga attgagcagc tactgcatga gtatcaagga gcacgtccgc
180
tctgatggcc tatccgagtt tggcatctgc accctcgacg ccgccaccgc cgagttccga
240
tacatgacat tcgtcgacga tgccgtgctg tcacaactcg agacattgct gcgttctcta
300
cgcacacagg aagtcttgca tgaaaaaggg gtcattgttc cttccacgct gcgcttgatc
360
cgcaacgcgg tgcccaccac ctgccaaatt accatgctca agcctgatac cgaattgtcg
420

gagaga

426

<210> 284

<211> 142

<212> PRT

<213> Homo sapiens

<400> 284

```

Arg Val Asp Gln Cys Glu Thr Ala Val Thr Lys Gly Met Arg Asp Lys
 1             5             10             15
Ser Val Gly Ser Gly Pro Asp Ile Val Arg Arg Glu Leu Arg His Val
      20             25             30
Val Thr Ser Gly Thr Ile Val Asp Gly Ser Val Leu Ala Asp Glu Leu
      35             40             45
Ser Ser Tyr Cys Met Ser Ile Lys Glu His Val Arg Ser Asp Gly Leu
      50             55             60
Ser Glu Phe Gly Ile Cys Thr Leu Asp Ala Ala Thr Ala Glu Phe Arg
      65             70             75             80
Tyr Met Thr Phe Val Asp Asp Ala Val Leu Ser Gln Leu Glu Thr Leu
      85             90             95
Leu Arg Ser Leu Arg Ile Lys Glu Val Leu His Glu Lys Gly Val Met
      100            105            110
Leu Pro Ser Thr Leu Arg Leu Ile Arg Asn Ala Val Pro Thr Thr Cys
      115            120            125
Gln Ile Thr Met Leu Lys Pro Asp Thr Glu Leu Ser Glu Arg
      130            135            140

```

<210> 285

<211> 345

<212> DNA

<213> Homo sapiens

<400> 285

```

acgcgtgcag tcccttaccg acatgctggc agatgagctc gacggcagcc gcttcaccgg
60
cgattttctca gaaatctaca aacgtcagaa ctcgatcttc ggcgatgtaa ggaataactt
120
ttacaaaaaa ggataccgca tcatcaacgt agcgaatggt gtattgcgca agatttcact
180
ggtaagcgca ggcaatgcag acaatgtgaa aggtcaggcc ctggttcttc gcggtgtggc
240
gcatttcgaa ctcgtgcggt tgtttgcaca accctggggg tatacttcgg acaattcaca
300
ctacggcatc ccgctccgca atgaaatcgt aattggttct attcn
345

```

<210> 286

<211> 107

<212> PRT

<213> Homo sapiens

<400> 286

```

Met Leu Ala Asp Glu Leu Asp Gly Ser Arg Phe Thr Gly Asp Phe Ser

```

1	5	10	15
Glu Ile Tyr Lys Arg Gln Asn Ser Ile Phe Gly Asp Val Arg Asn Asn			
	20	25	30
Phe Tyr Lys Lys Gly Tyr Arg Ile Ile Asn Val Ala Asn Gly Val Leu			
	35	40	45
Arg Lys Ile Ser Leu Val Ser Ala Gly Asn Ala Asp Asn Val Lys Gly			
	50	55	60
Gln Ala Leu Phe Phe Arg Gly Val Ala His Phe Glu Leu Val Arg Leu			
65	70	75	80
Phe Ala Gln Pro Trp Gly Tyr Thr Ser Asp Asn Ser His Tyr Gly Ile			
	85	90	95
Pro Leu Arg Asn Glu Ile Val Ile Gly Ser Ile			
	100	105	

<210> 287

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 287

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120
gttttgcagg tcacggccag gggctttggg cgcgtgttac agtttgcta cactgccaag
180
ctgttactca gcagagaaaa catccgcgag gtcacccgct gtgctgagtt cctgcgcatg
240
cacaacctgg aggactcctg cttcagcttc ctgcagaccc agctcctgaa cagtgaggat
300
ggcctgtttg tgtgccggaa ggatgctgcg tgccagcgcc cacacgagga ctgcgagaac
360
tctgcaggag aggaggagga tgaagaggag gagacgatgg attcagagac ggccaagatg
420
gcttgcccca gggaccagat gcttcagag cccatcagct ttgaggcgcg cgccatcccc
480
gtagcagaga aggaagaagc cctgctgccc gagcctgacg tgcccacaga caccaaggag
540
agctcagaaa aggacgcgtt aacgcagtac cccagataca agaaatacca gcttgcattg
600
accaagaatg tctataatgc atcatcacac agtacctcag gttttgcaag cacattccgg
660
gaagataact ctagcaacag cctcaagccg gggcttgcca gggggcagat taaaagtgg
720
ccgcccagtg aagagaatga ggaagagagc atcacgctct gcctgtctgg agatgagcct
780
gacgccaagg acagagcggg ggatgtogag atggaccgga aacagcccag ccctgcccc
840
acccccacgg cccagctgg ggcgcctgc ctggagagat ccaggagcgt ggctcgccc
900
tcctgcttaa ggtctctgtt cagcataacg aaaagtgtgg agctgtctgg cctgcccagt
960
acatctcagc agcactttgc caggagtcca gcctgccctt ttgacaaggg gatcactcag
1020

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ggtgacctta aaactgacta cacccttttc acaggaatt atggacagcc ccacgtgggc
 1080
 cagaaggagg tgtccaactt caccatggggg tcgcccctca gggggcctgg gttggaggct
 1140
 ctctgtaaac aggagggaga gctggaccgg aggagcgtga tcttctcttc cagcgttgt
 1200
 gaccaagtga gcacctcggt gcattcttat tctgggggtga gcagtttga caaagacctc
 1260
 tctgagccgg tgccaaaggg tctgtgggtg ggagccggcc agtccctccc cagctcgcag
 1320
 gcctactccc acggtgggct gatggccgac cacttgccag gaaggatgcg gcccaacac
 1379

<210> 288

<211> 428

<212> PRT

<213> Homo sapiens

<400> 288

Met	Val	Met	Leu	Ala	Ile	Ser	Leu	Phe	Val	Leu	Gln	Val	Thr	Ala	Arg
1				5					10					15	
Gly	Phe	Gly	Pro	Leu	Leu	Gln	Phe	Ala	Tyr	Thr	Ala	Lys	Leu	Leu	
			20					25					30		
Ser	Arg	Glu	Asn	Ile	Arg	Glu	Val	Ile	Arg	Cys	Ala	Glu	Phe	Leu	Arg
		35					40					45			
Met	His	Asn	Leu	Glu	Asp	Ser	Cys	Phe	Ser	Phe	Leu	Gln	Thr	Gln	Leu
	50					55					60				
Leu	Asn	Ser	Glu	Asp	Gly	Leu	Phe	Val	Cys	Arg	Lys	Asp	Ala	Ala	Cys
65					70					75				80	
Gln	Arg	Pro	His	Glu	Asp	Cys	Glu	Asn	Ser	Ala	Gly	Glu	Glu	Glu	Asp
				85					90					95	
Glu	Glu	Glu	Glu	Thr	Met	Asp	Ser	Glu	Thr	Ala	Lys	Met	Ala	Cys	Pro
				100					105				110		
Arg	Asp	Gln	Met	Leu	Pro	Glu	Pro	Ile	Ser	Phe	Glu	Ala	Ala	Ala	Ile
		115					120					125			
Pro	Val	Ala	Glu	Lys	Glu	Glu	Ala	Leu	Leu	Pro	Glu	Pro	Asp	Val	Pro
	130						135					140			
Thr	Asp	Thr	Lys	Glu	Ser	Ser	Glu	Lys	Asp	Ala	Leu	Thr	Gln	Tyr	Pro
145					150					155				160	
Arg	Tyr	Lys	Lys	Tyr	Gln	Leu	Ala	Cys	Thr	Lys	Asn	Val	Tyr	Asn	Ala
				165					170					175	
Ser	Ser	His	Ser	Thr	Ser	Gly	Phe	Ala	Ser	Thr	Phe	Arg	Glu	Asp	Asn
			180					185					190		
Ser	Ser	Asn	Ser	Leu	Lys	Pro	Gly	Leu	Ala	Arg	Gly	Gln	Ile	Lys	Ser
		195					200					205			
Glu	Pro	Pro	Ser	Glu	Glu	Asn	Glu	Glu	Glu	Ser	Ile	Thr	Leu	Cys	Leu
	210					215						220			
Ser	Gly	Asp	Glu	Pro	Asp	Ala	Lys	Asp	Arg	Ala	Gly	Asp	Val	Glu	Met
225					230					235				240	
Asp	Arg	Lys	Gln	Pro	Ser	Pro	Ala	Pro	Thr	Pro	Thr	Ala	Pro	Ala	Gly
				245					250					255	
Ala	Ala	Cys	Leu	Glu	Arg	Ser	Arg	Ser	Val	Ala	Ser	Pro	Ser	Cys	Leu
			260					265					270		
Arg	Ser	Leu	Phe	Ser	Ile	Thr	Lys	Ser	Val	Glu	Leu	Ser	Gly	Leu	Pro

275					280					285						
Ser	Thr	Ser	Gln	Gln	His	Phe	Ala	Arg	Ser	Pro	Ala	Cys	Pro	Phe	Asp	
290					295					300						
Lys	Gly	Ile	Thr	Gln	Gly	Asp	Leu	Lys	Thr	Asp	Tyr	Thr	Pro	Phe	Thr	
305					310					315					320	
Gly	Asn	Tyr	Gly	Gln	Pro	His	Val	Gly	Gln	Lys	Glu	Val	Ser	Asn	Phe	
325					330					335						
Thr	Met	Gly	Ser	Pro	Leu	Arg	Gly	Pro	Gly	Leu	Glu	Ala	Leu	Cys	Lys	
340					345					350						
Gln	Glu	Gly	Glu	Leu	Asp	Arg	Arg	Ser	Val	Ile	Phe	Ser	Ser	Ser	Ala	
355					360					365						
Cys	Asp	Gln	Val	Ser	Thr	Ser	Val	His	Ser	Tyr	Ser	Gly	Val	Ser	Ser	
370					375					380						
Leu	Asp	Lys	Asp	Leu	Ser	Glu	Pro	Val	Pro	Lys	Gly	Leu	Trp	Val	Gly	
385					390					395					400	
Ala	Gly	Gln	Ser	Leu	Pro	Ser	Ser	Gln	Ala	Tyr	Ser	His	Gly	Gly	Leu	
405					410					415						
Met	Ala	Asp	His	Leu	Pro	Gly	Arg	Met	Arg	Pro	Asn					
420					425											

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<210> 289
<211> 822
<212> DNA
<213> Homo sapiens
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<400> 289
ngcattaccg ggctgaagac ggggtgctcat gacctcaacg atataggcta ttgctagaac
60
cacgccggcc cacgccgcgc aaagcgcaga cacggcacca ggaggggtca catggctgat
120
agcaagtcga aggcgaagga cgagcgcact gccgatgaga tcaggcggga tattgcagcg
180
acccgtgctt gcctggcagc cggggtgagg aacctcgtgg aggaggtgca tccggcaacc
240
ctcaagcgtg aagcatctga tcgtgcccg tattttgtgc agggtgagtt tgatcaggtc
300
aagagccagg tcaaagatga gaaatggtgg cgcgtgcagc ggatcgcgat ggccgcagga
360
gtgctcgtcg ccggcgtcgt cagcattatt gtgctgcgcg cgatagtcgg tcgcgcaacg
420
ggcgtaccg ctctgcgcaa gcttgagaag ctgcagcttt ctcaggcgaa gcggggttcga
480
aaagatgcc aagcagcgtag taaggaagat gaaaaggcag ccaagaaaaa tgccaagctc
540
ggcaagaaga acgctaagaa gtacggcaag ctcgataccg atgactcgtc ggtaagcaac
600
cttgccgaga aaatgctcaa acaggccgcc gtgctgcgtg cacaggcggc tgccggggcg
660
tgagaacagt gccgcctagc aaacagcggc cacagcgcaa aacaggtttg gtcgcgacc
720
atggtggacc ggagccaaac tgtgttaccg catcatttga taccgccagc agccaggcct
780
gcgacaatgc gacgctggaa taccagcacc atgatgacta gt
822

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<210> 290
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 290
 Met Ala Asp Ser Lys Ser Lys Ala Lys Asp Glu Arg Thr Ala Asp Glu
 1 5 10 15
 Ile Arg Arg Asp Ile Ala Ala Thr Arg Ala Cys Leu Ala Ala Gly Val
 20 25 30
 Glu Asn Leu Val Glu Glu Val His Pro Ala Thr Leu Lys Arg Glu Ala
 35 40 45
 Ser Asp Arg Ala Arg Asp Phe Val Gln Gly Glu Phe Asp Gln Val Lys
 50 55 60
 Ser Gln Val Lys Asp Glu Lys Trp Trp Arg Val Gln Arg Ile Ala Met
 65 70 75 80
 Ala Ala Gly Val Leu Ala Ala Gly Val Val Ser Ile Ile Val Leu Arg
 85 90 95
 Ala Ile Val Gly Arg Ala Thr Gly Ala Thr Ala Arg Arg Lys Leu Glu
 100 105 110
 Lys Leu Gln Leu Ser Gln Ala Lys Arg Val Arg Lys Asp Ala Lys Gln
 115 120 125
 Arg Ser Lys Glu Asp Glu Lys Ala Ala Lys Lys Asn Ala Lys Leu Gly
 130 135 140
 Lys Lys Asn Ala Lys Lys Tyr Gly Lys Leu Asp Thr Asp Asp Ser Ser
 145 150 155 160
 Val Ser Asn Leu Ala Glu Lys Met Leu Lys Gln Ala Ala Val Leu Arg
 165 170 175
 Ala Gln Ala Ala Ala Gly Ala
 180

<210> 291
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 291
 ctccacgccg acaagactta cgacgggagt cgctgcccgg ctgagtgcgc ggcccgcctc
 60
 atcaccccc gcacgcctcg ccgcggcggtg gagaccagcg agcgcttgagg ccggtatcgc
 120
 tgggtcgctcg agcgacacct cgctgggttc aaccgctttc ggcgctcgc catccgctac
 180
 gaggggcggtg ctgacatcca cgaagccttc gtgacccctg gctgcgccct catctgcctc
 240
 aaccagatca gacggttttg ttaggtgctg taaagggaga atggctgcag ctgggctatc
 300
 tgctccctcg tcaaccagaa acaggctgct catcctcact caacaacgcg t
 351

<210> 292
 <211> 87
 <212> PRT

<213> Homo sapiens

<400> 292

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Leu His Ala Asp Lys Thr Tyr Asp Gly Arg Arg Cys Arg Ala Glu Cys
 1           5           10           15
Arg Ala Arg Ser Ile Thr Pro Arg Ile Ala Arg Arg Gly Val Glu Thr
          20           25           30
Ser Glu Arg Leu Gly Arg Tyr Arg Trp Val Val Glu Arg Thr Phe Ala
          35           40           45
Trp Leu Asn Arg Phe Arg Arg Leu Ala Ile Arg Tyr Glu Arg Arg Ala
          50           55           60
Asp Ile His Glu Ala Phe Val Ile Leu Gly Cys Ala Leu Ile Cys Leu
65           70           75           80
Asn Gln Ile Arg Arg Phe Cys
          85

```

<210> 293

<211> 716

<212> DNA

<213> Homo sapiens

<400> 293

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nncttcacca caccggccat caacgcacct cctcgtgata acttgacctt ctgccgaacc
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ggttaatcag tttagtggcg aggcattgaca cgttgacgag tcagctgtgg tacatgtgcg
120
gaacactcac aatgccacgg cggcatgttg ctgtcgggtca cgacccttat ggtgatcgct
180
gtgagaaccc gaacggcaga tgcgattctg gcggcactgg atctgaacag gtttaagggt
240
gcgaagactt tcgatgttcc agtgtgcgtc atagctgggt cggggacagg taaaactcgt
300
gctgtcactc atcgcattgc ctacgggtgca gcgacaggca agcttgatcc gcgtcgtacc
360
ctcgcgggtca cttttacgac taaggcagct ggcacgatga gaggtcgact cgccgatctg
420
ggggttggtg gtgtgcaggc tcgcactatt cattctgcgg cgttgcggtc gatcaagttt
480
ttctggcctc gtgcatataa ctgtgagttg ccaccggtga gtgattctcg tttctcgatg
540
gtggcggaga cgaccatcg cattggtctg ggcaatgaca aggcgctgct gcgcgacttg
600
tccgccgaga tctcgtgggc gaagggtctca aatgtgccga ctgatcaata cgcattccctg
660
gctagggcgg aagggtcgggt ggtggcggga gtttcggcaa ctgacgtagg acgcgt
716

```

<210> 294

<211> 190

<212> PRT

<213> Homo sapiens

<400> 294

```

Met Leu Leu Ser Val Thr Thr Leu Met Val Ile Ala Val Arg Thr Arg

```

```

      1           5           10           15
Thr Ala Asp Ala Ile Leu Ala Ala Leu Asp Leu Asn Arg Phe Lys Val
      20           25           30
Ala Lys Thr Phe Asp Val Pro Val Cys Val Ile Ala Gly Ala Gly Thr
      35           40           45
Gly Lys Thr Arg Ala Val Thr His Arg Ile Ala Tyr Gly Ala Ala Thr
      50           55           60
Gly Lys Leu Asp Pro Arg Arg Thr Leu Ala Val Thr Phe Thr Thr Lys
      65           70           75           80
Ala Ala Gly Thr Met Arg Gly Arg Leu Ala Asp Leu Gly Val Val Gly
      85           90           95
Val Gln Ala Arg Thr Ile His Ser Ala Ala Leu Arg Gln Ile Lys Phe
      100          105          110
Phe Trp Pro Arg Ala Tyr Asn Cys Glu Leu Pro Pro Val Ser Asp Ser
      115          120          125
Arg Phe Ser Met Val Ala Glu Thr Thr His Arg Ile Gly Leu Gly Asn
      130          135          140
Asp Lys Ala Leu Leu Arg Asp Leu Ser Ala Glu Ile Ser Trp Ala Lys
      145          150          155          160
Val Ser Asn Val Pro Thr Asp Gln Tyr Ala Ser Leu Ala Arg Ala Glu
      165          170          175
Gly Arg Val Val Ala Gly Val Ser Ala Thr Asp Val Gly Arg
      180          185          190

```

<210> 295

<211> 417

<212> DNA

<213> Homo sapiens

<400> 295

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ttcatatcag gcagtaccgc agtccatgcg atcaacaacg tcagcgtatc tttcacccat
60
tctggagtgc accttctcat gggagaaagc ggatcaggaa aaagcaccct catcaatctc
120
ctagctgggc tggatacccc agattcgggg tccgtctacg cagaaggcgt caccgtatct
180
gatcagagcg aggcgagcag agcccaattt cgattacgcc acatcgccgt catcttccag
240
gacgacaacc tcatecgtga gttgaccaat accgagaata ttgcgctacc cctgtgggcg
300
cagggcacat cgaagtccga tgccactgaa atcgcccacg aagccatgcg aaaactagga
360
atcgagtcac tgggcagacg ctaccccggc gaggtctcgg gtggccaacg gcaacgc
417

```

<210> 296

<211> 139

<212> PRT

<213> Homo sapiens

<400> 296

```

Phe Ile Ser Gly Ser Thr Arg Val His Ala Ile Asn Asn Val Ser Val
      1           5           10           15
Ser Phe Thr His Ser Gly Val His Leu Leu Met Gly Glu Ser Gly Ser

```

```

          20          25          30
Gly Lys Ser Thr Leu Ile Asn Leu Leu Ala Gly Leu Asp Thr Pro Asp
          35          40          45
Ser Gly Ser Val Tyr Ala Glu Gly Val Thr Val Ser Asp Gln Ser Glu
          50          55          60
Ala Ser Arg Ala Gln Phe Arg Leu Arg His Ile Ala Val Ile Phe Gln
65          70          75          80
Asp Asp Asn Leu Ile Ala Glu Leu Thr Asn Thr Glu Asn Ile Ala Leu
          85          90          95
Pro Leu Trp Ala Gln Gly Thr Ser Lys Ser Asp Ala Thr Glu Ile Ala
          100          105          110
His Glu Ala Met Arg Lys Leu Gly Ile Glu Ser Leu Gly Arg Arg Tyr
          115          120          125
Pro Gly Glu Val Ser Gly Gly Gln Arg Gln Arg
          130          135

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<210> 297

<211> 378

<212> DNA

<213> Homo sapiens

<400> 297

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tacaccatcg gtgaccagat tgtcgaagct ctgcaggtgc actcgaagat gtccgacaag
60
gacgcttggg cgcgtgccat cgagctgctc gacttggtgg ggattccgaa tcccagagtg
120
cgtgccaaag cttttccgca cgagttttcc ggtggcatga ggcaacgagt cgtcatcgcc
180
atggccatcg cgaacgaccc tgacctcatc atcgccgacg agccgacgac ggccctcgac
240
gtgaccatcc aggcccagat tctcgatttg ctgcgcgtag cccagcgtga aaccatgcg
300
ggcgtcgta tgatcaccca cgacctcggg gtggtagctg gtctggctga cagggttgcc
360
gtgatgtatg ccggacgc
378

```

<210> 298

<211> 126

<212> PRT

<213> Homo sapiens

<400> 298

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Tyr Thr Ile Gly Asp Gln Ile Val Glu Ala Leu Gln Val His Ser Lys
1          5          10          15
Met Ser Asp Lys Asp Ala Trp Ala Arg Ala Ile Glu Leu Leu Asp Leu
          20          25          30
Val Gly Ile Pro Asn Pro Glu Val Arg Ala Lys Ala Phe Pro His Glu
          35          40          45
Phe Ser Gly Gly Met Arg Gln Arg Val Val Ile Ala Met Ala Ile Ala
          50          55          60
Asn Asp Pro Asp Leu Ile Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp
65          70          75          80
Val Thr Ile Gln Ala Gln Ile Leu Asp Leu Leu Arg Val Ala Gln Arg

```

	85		90		95
Glu Thr His	Ala Gly Val Val Met Ile Thr His Asp Leu Gly Val Val				
	100		105		110
Ala Gly Leu Ala Asp Arg Val	Ala Val Met Tyr Ala Gly Arg				
	115		120		125

<210> 299
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 299
 gtgcacggtt tcgttggcat gcgcaatgac cgggagaact tgcgttttga tccgagactt
 60
 ccagcccaat ggacgtcgat caaacaccac atgctcattg ggcactctca catgctcggt
 120
 ttcttgaac gtgacgcat tacgttccag attctgtcgg gccatgaccg cgacgtgaca
 180
 gtgcgcggtg agctctacca cattgggggtt gagccggtga gggtgccgtt gtccgatcag
 240
 gggccgttgc gtctagcct gcgcgttacc catccgatct cggggttgcg tcgagctgac
 300
 ggttctctta tcaactgcaga agttcccggc agcattgctg agacgattgg gtcttctccg
 360
 atctcgac
 368

<210> 300
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 300
 Val His Gly Phe Val Gly Met Arg Asn Asp Arg Glu Asn Leu Arg Phe
 1 5 10 15
 Asp Pro Arg Leu Pro Ala Gln Trp Thr Ser Ile Lys His His Met Leu
 20 25 30
 Ile Gly Asp Ser His Met Leu Val Phe Leu Glu Arg Asp Ala Ile Thr
 35 40 45
 Phe Gln Ile Leu Ser Gly His Asp Arg Asp Val Thr Val Arg Gly Glu
 50 55 60
 Leu Tyr His Ile Gly Val Glu Pro Val Arg Val Pro Leu Ser Asp Gln
 65 70 75 80
 Gly Pro Leu Arg Pro Ser Leu Arg Val Thr His Pro Ile Ser Gly Leu
 85 90 95
 Arg Arg Ala Asp Gly Ser Leu Ile Thr Ala Glu Val Pro Gly Ser Ile
 100 105 110
 Ala Glu Thr Ile Gly Ser Ser Pro Ile Ser
 115 120

<210> 301
 <211> 456
 <212> DNA
 <213> Homo sapiens

<400> 301
 ggcgcgggtta ttgcccgccc gtttgtcggg gaaacccggc agaccttcga gcgcaccggc
 60
 aaccggcgcg actattecgt accgccgccc gaaccgacct tgctcgacag gcttacggac
 120
 gcggggccgga cggtgatcgc aatcggcaag attggtgata tctacgcgca caaaggcgtg
 180
 tctcaggtgc gtaaggcaat ggcaatattg gccttgttcg atgaaacact cattgccatg
 240
 gacgacgcgc aggacggcga tctggtcttc accaacttcg tggatttcga catgctctac
 300
 gggcatcgca gggatgtgcc cggtatgcc gccgcgctcg aggctttcga ccggaggctg
 360
 ccggaagcca tggcgaaatt gcggacgggc gatcttctga tcctgacagc cgatcatggc
 420
 tgcgaccga ccctcaaggg aaccgaccac acgcgt
 456

<210> 302
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 302
 Gly Arg Val Ile Ala Arg Pro Phe Val Gly Glu Thr Arg Gln Thr Phe
 1 5 10 15
 Glu Arg Thr Gly Asn Arg Arg Asp Tyr Ser Val Pro Pro Pro Glu Pro
 20 25 30
 Thr Leu Leu Asp Arg Leu Thr Asp Ala Gly Arg Thr Val Ile Ala Ile
 35 40 45
 Gly Lys Ile Gly Asp Ile Tyr Ala His Lys Gly Val Ser Gln Val Arg
 50 55 60
 Lys Ala Met Ala Ile Leu Ala Leu Phe Asp Glu Thr Leu Ile Ala Met
 65 70 75 80
 Asp Asp Ala Gln Asp Gly Asp Leu Val Phe Thr Asn Phe Val Asp Phe
 85 90 95
 Asp Met Leu Tyr Gly His Arg Arg Asp Val Pro Gly Tyr Ala Ala Ala
 100 105 110
 Leu Glu Ala Phe Asp Arg Arg Leu Pro Glu Ala Met Ala Lys Leu Arg
 115 120 125
 Thr Gly Asp Leu Leu Ile Leu Thr Ala Asp His Gly Cys Asp Pro Thr
 130 135 140
 Leu Lys Gly Thr Asp His Thr Arg
 145 150

<210> 303
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 303
 nncgtgggca tcgaggagtt cctcgacatg aagtatcagc cgacgccgat tcacgtcgc
 60

tgacagcggg tttccggaac acatcagcgt tcagacagga gcgaggagac catgtacctg
 120
 ggtgctcagc tggttcagtga cagcgagtag gagcagcgcc tgagacgtgt ccgtgagctc
 180
 atggaccgtc aggggtctgtc ggcgatcacc gtcaccgacc cggccaacat cttctatctg
 240
 atcgggttaca acgcctgggc gttctacacc ccgcagatgc tgttcgtgcc gatcgacgga
 300
 gagatgggtcc tctacgctcg cgagatggat cgcacggcgc acatcngcac gacgtcggtg
 360
 cccgccgacc agatcgctcg ttaccgcgag agttatgtgc ac
 402

<210> 304

<211> 97

<212> PRT

<213> Homo sapiens

<400> 304

Met	Tyr	Leu	Gly	Ala	Gln	Leu	Phe	Ser	Asp	Ser	Glu	Tyr	Glu	Gln	Arg
1				5					10					15	
Leu	Arg	Arg	Val	Arg	Glu	Leu	Met	Asp	Arg	Gln	Gly	Leu	Ser	Ala	Ile
			20					25					30		
Ile	Val	Thr	Asp	Pro	Ala	Asn	Ile	Phe	Tyr	Leu	Ile	Gly	Tyr	Asn	Ala
		35				40						45			
Trp	Ser	Phe	Tyr	Thr	Pro	Gln	Met	Leu	Phe	Val	Pro	Ile	Asp	Gly	Glu
	50					55					60				
Met	Val	Leu	Tyr	Ala	Arg	Glu	Met	Asp	Arg	Met	Ala	His	Ile	Xaa	Thr
65				70					75				80		
Thr	Ser	Leu	Pro	Ala	Asp	Gln	Ile	Val	Gly	Tyr	Pro	Glu	Ser	Tyr	Val
			85					90					95		

His

<210> 305

<211> 375

<212> DNA

<213> Homo sapiens

<400> 305

nnacgcgtcg gttccgcatc gagcgaccgg atcgcatcga cgagcacgct gcaccagtgc
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 gtgtcgtcct ggccaatatg ggcgatcagc cggtagagtt cgggacgtgc gctcacctcg
 120
 gccgccattt cggatgcgac acgcgcgcct gcgcgctcgg cctccagcaa ctcgtcgagc
 180
 gtgccacca gcgcggcgcg atcttcatgc ggagtcagat cggcgcgggc gtcaggcccc
 240
 tcgccatgcg tcggaatcga catgcagcac cctcctgccg ggatcgatgg cgtaatacgt
 300
 gcgacgggtac acggcgcggtg ttgcacgaac gtgcaaatca gcgcgtgcct cgtgccatat
 360
 acgtcacatc atatg
 375

<210> 306
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 306
 Xaa Arg Val Gly Ser Ala Ser Ser Asp Arg Ile Ala Ser Thr Ser Thr
 1 5 10 15
 Leu His Gln Cys Val Ser Ser Trp Arg Ile Trp Ala Ile Ser Arg Tyr
 20 25 30
 Ser Ser Gly Ser Ser Leu Thr Ser Ala Ala Ile Ser Asp Ala Thr Arg
 35 40 45
 Ala Pro Ala Arg Ser Ala Ser Ser Asn Ser Ser Ser Val Ala Thr Ser
 50 55 60
 Ala Ala Arg Ser Ser Cys Gly Val Arg Ser Ala Arg Ala Ser Gly Pro
 65 70 75 80
 Ser Pro Cys Val Gly Ile Asp Met Gln His Pro Pro Ala Arg Ile Asp
 85 90 95
 Gly Val Ile Arg Ala Thr Val His Gly Ala Cys Cys Thr Asn Val Gln
 100 105 110
 Ile Ser Ala Cys Leu Val Pro Tyr Thr Ser His His Met
 115 120 125

<210> 307
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 307
 actagttctg gccgctcccc tggggctttg ggtaacaatt gtcagcccca cccatcctag
 60
 ggttaggaag gctattctct ttggccactc tcatacctaag acctatttgg agaacctctg
 120
 gggtttgagt ctttttttca gcagaatgag gcttgatccc gcattatagc acctcgaca
 180
 tttgatgtct cttcttctca cccactcacc ccacctggg ggttggggca aaaaagtggc
 240
 tcaaagctgc ggttcagagt tccttgtaaa caaggctcct ccctcactgt cctcacctg
 300
 ctccagcaga gggagcagcg gaaggaccac tctgctgcag ccatacctgt ttctaaccga
 360
 gcagaactgg acataatggg aacagggtct gaagacaatc aatccagggc tgcagtgggt
 420
 gctgagctctg gggaagcctc cacctggagg ggcagctggg cagtggcagc tcccttgga
 480
 tggctcagcc tctggacatc accccaccca accagagccc tggctcttgc tggatgtcca
 540
 cagatgagtg cctgggattg gtctcagcca ctatgggggg gatgtgcagg gagaggtgat
 600
 gagggagtga gcaggactgt ctatgtgcct ctgtcctcat cctgaggctt gggctctgaa
 660
 ttggtgctgc agcactggca cgcgt
 685

<210> 308
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 308
 Met Leu Val Ser Asn Pro Ala Glu Leu Asp Ile Met Gly Thr Gly Ser
 1 5 10 15
 Glu Asp Asn Gln Ser Arg Ala Ala Val Gly Ala Glu Ser Gly Glu Ala
 20 25 30
 Ser Thr Trp Arg Gly Ser Trp Ala Val Ala Ala Pro Leu Glu Trp Leu
 35 40 45
 Ser Leu Trp Thr Ser Pro His Pro Thr Arg Ala Leu Ala Leu Ala Gly
 50 55 60
 Cys Pro Gln Met Ser Ala Trp Asp Trp Ser Gln Pro Leu Trp Gly Gly
 65 70 75 80
 Cys Ala Gly Arg Gly Asp Glu Gly Val Ser Arg Thr Val Tyr Val Pro
 85 90 95
 Leu Ser Ser Ser
 100

<210> 309
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 309
 caggctcgta ctattcgat ccctgtgcat atggctcgagg tcatcaataa gctggctcgc
 60
 gtccagcgtc agatgctcca ggacctaggt cgtgagccca ccccggaaga gcttgccaac
 120
 gaactcgata tgaccgcaga gaaggtcatt gaggtgcaga aatacggtcg cgagccgatc
 180
 tcgctgcata cccactggg tgaggatggc gattctgagt tcggtgacct tattgaggat
 240
 tccgaggcca tcgtgccagc agacgccgc aacttcaccc tgttgaggga gcagctgcac
 300
 gatgtcctcg ataccttgtc cgagcgagag gccggtgtcg tgcgatgag attcggcttg
 360
 accgacggac agcccaagac cctggatgag atcggcaaag tctacggtgt tactcgggag
 420
 cgcacccgcc ag
 432

<210> 310
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 310
 Gln Ala Arg Thr Ile Arg Ile Pro Val His Met Val Glu Val Ile Asn
 1 5 10 15
 Lys Leu Ala Arg Val Gln Arg Gln Met Leu Gln Asp Leu Gly Arg Glu


```

      20      25      30
Pro Thr Pro Glu Glu Leu Ala Asn Glu Leu Asp Met Thr Ala Glu Lys
      35      40      45
Val Ile Glu Val Gln Lys Tyr Gly Arg Glu Pro Ile Ser Leu His Thr
      50      55      60
Pro Leu Gly Glu Asp Gly Asp Ser Glu Phe Gly Asp Leu Ile Glu Asp
65      70      75      80
Ser Glu Ala Ile Val Pro Ala Asp Ala Val Asn Phe Thr Leu Leu Gln
      85      90      95
Glu Gln Leu His Asp Val Leu Asp Thr Leu Ser Glu Arg Glu Ala Gly
      100      105      110
Val Val Ser Met Arg Phe Gly Leu Thr Asp Gly Gln Pro Lys Thr Leu
      115      120      125
Asp Glu Ile Gly Lys Val Tyr Gly Val Thr Arg Glu Arg Ile Arg Gln
      130      135      140

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<210> 311

<211> 358

<212> DNA

<213> Homo sapiens

<400> 311

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acgcgtatcg aaaatatccc tcccattatt accgctcgcc ctgaactgat ggctcatgaa
60
ctgacgccag aatctcttga tgcgagcctg gagtgggccg atgtggtggt cattggctct
120
ggactgggac aacaagcgtg gggcaaaaaa gcgctacaaa aggtcgagaa ttgtcgtaaa
180
ccgatgctgt gggatgccga cgcgcttaac cttctggcaa tcaatcctga taaacgtcac
240
aatcgcatcc tgacgccaca ccccggcgag gccgcgcggc tgcttagctg cagcgtcgca
300
gaaattgaaa acgatcgctt acttntctgc gcacgtctgg taaaacggta acccgagt
358

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<210> 312

<211> 116

<212> PRT

<213> Homo sapiens

<400> 312

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Thr Arg Ile Glu Asn Ile Pro Pro Ile Ile Thr Ala Arg Pro Glu Leu
1      5      10      15
Met Ala His Glu Leu Thr Pro Glu Ser Leu Asp Ala Ser Leu Glu Trp
      20      25      30
Ala Asp Val Val Val Ile Gly Pro Gly Leu Gly Gln Gln Ala Trp Gly
      35      40      45
Lys Lys Ala Leu Gln Lys Val Glu Asn Cys Arg Lys Pro Met Leu Trp
      50      55      60
Asp Ala Asp Ala Leu Asn Leu Leu Ala Ile Asn Pro Asp Lys Arg His
65      70      75      80
Asn Arg Ile Leu Thr Pro His Pro Gly Glu Ala Ala Arg Leu Leu Ser
      85      90      95
Cys Ser Val Ala Glu Ile Glu Asn Asp Arg Leu Leu Xaa Cys Ala Arg

```

100 105 110
 Leu Val Lys Arg
 115

<210> 313
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 313
 ncaactgaaa gcattgagat gagcgacgtg ctgtccccct tccacccac caaggccaac
 60
 acccctgggtg gcgaaccgcg caccatccgc acctcgaacg cgcacatcat tgccgtcacc
 120
 agtgggcaaag gcggcgtggg caagaccttt gtctccgcca acctggccgc cgcgctgacc
 180
 cgccctgggac tgccgctgct ggtactggac gccgacctgg gcctggccaa cttggacgtg
 240
 gtgctgaacc tctaccccaa ggtgacgctg cacgatgtgt tcaccggcaa ggctcgtg
 300
 caagacgcgg tggtcacggc ccccggcggc ttccatgtgc tgctagc
 347

<210> 314
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 314
 Xaa Thr Glu Ser Ile Glu Met Ser Asp Val Leu Ser Pro Phe His Pro
 1 5 10 15
 Thr Lys Ala Asn Thr Pro Gly Gly Glu Pro Arg Thr Ile Arg Thr Ser
 20 25 30
 Asn Ala His Ile Ile Ala Val Thr Ser Gly Lys Gly Gly Val Gly Lys
 35 40 45
 Thr Phe Val Ser Ala Asn Leu Ala Ala Ala Leu Thr Arg Leu Gly Leu
 50 55 60
 Arg Val Leu Val Leu Asp Ala Asp Leu Gly Leu Ala Asn Leu Asp Val
 65 70 75 80
 Val Leu Asn Leu Tyr Pro Lys Val Thr Leu His Asp Val Phe Thr Gly
 85 90 95
 Lys Ala Ser Leu Gln Asp Ala Val Val Thr Ala Pro Gly Gly Phe His
 100 105 110
 Val Leu Leu
 115

<210> 315
 <211> 544
 <212> DNA
 <213> Homo sapiens

<400> 315
 nnacgcgttc gtcaacagga aaacaacaac ggcttctcgc tggagggaac catgcttgcc
 60

gaagatatct acgcgatcat gctgttttca tcgctcatcc tggctgtccc ggggccatcc
 120
 aacaccttgc tgcctcagcgc ccgtttccat ttcggctcgc tgcgggcggc gcccttcac
 180
 ctgcttgagg cgttgggcta ctcgctatcc atttcggcat ggggctgggt attggcgcgc
 240
 ctgtccgaga gcaatccatg gatcatcagt ctgaccaagg cactctgcgc gctatatgtg
 300
 gcgcttctgg cgggtgaagac ctggaatgcc ntcgatccgc agtgcggggc cggtaacttc
 360
 cgccatgggc ccctgcccct gttcgtggca accctgtcga acccgaaggc gctgatcttc
 420
 gccagcgtga tctttcccg caaggcgttc ctcgacttct ggaacaacta cacgatctcg
 480
 ctgctggcct tcttggttgt gctggcgccc atcgggatgc tttgggtcgg gctggggggc
 540
 ggta
 544

<210> 316
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 316
 Ile Tyr Ala Ile Met Leu Phe Ser Ser Leu Ile Leu Val Val Pro Gly
 1 5 10 15
 Pro Ser Asn Thr Leu Leu Leu Ser Ala Arg Phe His Phe Gly Ser Leu
 20 25 30
 Arg Ala Ala Pro Phe Ile Leu Leu Glu Ala Leu Gly Tyr Ser Leu Ser
 35 40 45
 Ile Ser Ala Trp Gly Trp Val Leu Ala Arg Leu Ser Glu Ser Asn Pro
 50 55 60
 Trp Ile Ile Ser Leu Thr Lys Ala Leu Cys Ala Leu Tyr Val Ala Leu
 65 70 75 80
 Leu Ala Val Lys Thr Trp Asn Ala Xaa Asp Pro Gln Cys Gly Ala Gly
 85 90 95
 Asn Phe Arg His Gly Pro Leu Pro Leu Phe Val Ala Thr Leu Ser Asn
 100 105 110
 Pro Lys Ala Leu Ile Phe Ala Ser Val Ile Phe Pro Gly Lys Ala Phe
 115 120 125
 Leu Asp Phe Trp Asn Asn Tyr Thr Ile Ser Leu Leu Ala Phe Leu Val
 130 135 140
 Val Leu Ala Pro Ile Gly Met Leu Trp Val Gly Leu Gly Ala Gly
 145 150 155

<210> 317
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 317
 nggtcagcct ctcgccagc caattctctt aagatacatg agctgctatg agtaccaaag
 60

ccagaggttt gtccactgag agaagcacat tggaaagggg ggcgtgggccc tgggactgtg
 120
 tggcacttta tgcacggggg gggcctaagg gggnggtcc accaaccatg cactgngggg
 180
 ggggtgtggg taacatgccg tgcattttgg ggggtgtgcca tgagtggcac accatggggg
 240
 tggcatgtgg ggcattgtat catgtggtgt tggcgcagca aactcagctc ttacctggct
 300
 ggggccagcc tctaaaactt ctcacattgg gctcccttct gac
 343

<210> 318

<211> 98

<212> PRT

<213> Homo sapiens

<400> 318

Met	Ser	Thr	Lys	Ala	Arg	Gly	Leu	Ser	Thr	Glu	Arg	Ser	Thr	Leu	Glu
1				5				10						15	
Arg	Gly	Ala	Trp	Ala	Trp	Asp	Cys	Val	Ala	Leu	Tyr	Ala	Arg	Gly	Gly
		20					25					30			
Pro	Lys	Gly	Gly	Gly	Pro	Pro	Thr	Met	His	Xaa	Gly	Trp	Gly	Val	Gly
		35					40					45			
Asn	Met	Pro	Cys	Ile	Leu	Gly	Val	Cys	His	Glu	Trp	His	Thr	Met	Gly
	50					55				60					
Val	Ala	Cys	Gly	Ala	Cys	Met	His	Val	Val	Leu	Ala	Gln	Gln	Thr	Gln
65				70						75				80	
Leu	Leu	Pro	Gly	Trp	Gly	Gln	Pro	Leu	Lys	Leu	Leu	Thr	Leu	Gly	Ser
			85					90						95	

Leu Leu

<210> 319

<211> 429

<212> DNA

<213> Homo sapiens

<400> 319

gaattctcga tgtacccctt cccggcagtc ctattctcga gctgagcggg cacagtggcc
 60
 ccgttaacag tgtggcttgg ggtccacca gccagagcac gttgcgaaat ggacctagta
 120
 agggcatgat atgtacagga ggcgacgatg ctcagtgcct cgtatatgat ctgactagct
 180
 caactcttcg aacagcatct gctcaaggac ggcgctctcg aaacagtcca tataaacaaa
 240
 gccattcacc gggaatagac ggatggcgtg tcggcgagca agtgccggtg ctcgcttata
 300
 cggccccgtc tatggtaaac aatgctagct ggctcggcat gcctgcgcca tcaaacgca
 360
 catcgctaca gagcaaacac cgcagccttt accgcagctt actcagttag tggactgagt
 420
 atacgtccn
 429

<210> 320
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 320
 Met Ile Cys Thr Gly Gly Asp Asp Ala Gln Cys Leu Val Tyr Asp Leu
 1 5 10 15
 Thr Ser Ser Thr Leu Arg Thr Ala Ser Ala Gln Gly Arg Arg Ser Arg
 20 25 30
 Asn Ser Pro Tyr Lys Gln Ser His Ser Pro Gly Ile Asp Gly Trp Arg
 35 40 45
 Val Gly Ala Glu Val Pro Val Leu Ala Tyr Thr Ala Pro Ser Met Val
 50 55 60
 Asn Asn Ala Ser Trp Leu Gly Met Pro Ala Pro Ser Lys Arg Thr Ser
 65 70 75 80
 Leu Gln Ser Lys His Arg Ser Leu Tyr Arg Ser Leu Leu Ser Glu Trp
 85 90 95
 Thr Glu Tyr Thr Ser
 100

<210> 321
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 321
 ngtgcacgac gtgctcgcca agtccctcgg gtcctctaata gcgatcaacg tggttcacgc
 60
 caccgtcgat gcgttgacgc agctcgagga gcccgaaagag gtgcgccgtc gccgcggcaa
 120
 gtccgttgag gagatcgccc cagcagccat gctgcgtgcg cgcaaggagg ccgacgaggg
 180
 cgccgctgct gcccgcatgg aggaaaaggc ggggggtaac tgatgagcaa gctgaagatc
 240
 acccagatca agtctggcat cgctaccaag ccaaatacatc gtgagaccct gcgcagcctc
 300
 ggactgaagc gtattggtga cacggtcatc aaggaggacc gcccgaggtt ccgcggcatg
 360
 gtccggaccg ttcgtcacct cgtcaccatg gaagagggtg actgacatgg ctattgagct
 420
 ccatgacctc aagcccgtc ctgggtgccc caaggccaag acccgcggtg gtcgtggtga
 480
 gggttccaag ggtaagaccg ctgggtcgcg taccaagggc accggtgcac
 530

<210> 322
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 322
 Met Ser Lys Leu Lys Ile Thr Gln Ile Lys Ser Gly Ile Ala Thr Lys

```

      1           5           10           15
Pro Asn His Arg Glu Thr Leu Arg Ser Leu Gly Leu Lys Arg Ile Gly
      20           25           30
Asp Thr Val Ile Lys Glu Asp Arg Pro Glu Phe Arg Gly Met Val Arg
      35           40           45
Thr Val Arg His Leu Val Thr Met Glu Glu Val Asp
      50           55           60

```

<210> 323
 <211> 468
 <212> DNA
 <213> Homo sapiens

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<400> 323
ntccggaccc gctgtggcca cgtattctgc cgttcctgta ttgctaccag tctaaagaac
60
aacaagtgga cctgtcctta ttgcggggca tatcttcctt cagaaggagt tccagcaact
120
gatgtagcca aaagaatgaa atcagagtat aagaactgcg ctgagtgtga caccctgggt
180
tgcctcagtg aaatgagggc acatattcgg acttgtcaga agtacataga taagtatgga
240
ccactacaag aacttgagga gacagcagca aggtgtgtat gtcccttttg tcagagggaa
300
ctgtatgaag acagcttgct ggatcattgt attactcatc acagatcgga acggaggcct
360
gtgttctgtc cactttgcca tttaataccc gatgagaatc caagcagctt cagtggcagt
420
ttaataagac atctgcaagt tagtcacact ttggtttatg atgatttc
468

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<210> 324
 <211> 156
 <212> PRT
 <213> Homo sapiens

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<400> 324
Xaa Arg Thr Arg Cys Gly His Val Phe Cys Arg Ser Cys Ile Ala Thr
      1           5           10           15
Ser Leu Lys Asn Asn Lys Trp Thr Cys Pro Tyr Cys Arg Ala Tyr Leu
      20           25           30
Pro Ser Glu Gly Val Pro Ala Thr Asp Val Ala Lys Arg Met Lys Ser
      35           40           45
Glu Tyr Lys Asn Cys Ala Glu Cys Asp Thr Leu Val Cys Leu Ser Glu
      50           55           60
Met Arg Ala His Ile Arg Thr Cys Gln Lys Tyr Ile Asp Lys Tyr Gly
      65           70           75           80
Pro Leu Gln Glu Leu Glu Glu Thr Ala Ala Arg Cys Val Cys Pro Phe
      85           90           95
Cys Gln Arg Glu Leu Tyr Glu Asp Ser Leu Leu Asp His Cys Ile Thr
      100           105           110
His His Arg Ser Glu Arg Arg Pro Val Phe Cys Pro Leu Cys His Leu
      115           120           125
Ile Pro Asp Glu Asn Pro Ser Ser Phe Ser Gly Ser Leu Ile Arg His

```

130 135 140
 Leu Gln Val Ser His Thr Leu Val Tyr Asp Asp Phe
 145 150 155

<210> 325
 <211> 374
 <212> DNA
 <213> Homo sapiens

<400> 325
 acgcgtgaag ggaggacgag gaagtaacgg gaagcacaag gccgctgctg gggagatggc
 60
 actggagccc cctaggaagc atctcacagg ctgtggccct tggcacgggg atctggggcc
 120
 aggtcgagcg caggtctggg tatcatgcga gtgcgggctc gctggggcgg gaaagagttt
 180
 ggagctctgc tcccaggga tccccactcc cgcagatgac ttgcccgaga gagttctgct
 240
 ggtggatttt gatggaaatt ctatttgatc gcacccactt ggttcactgt gtgcttcagg
 300
 gtcccaggt tttaggtgct tcatgccctg ctgggaacga gacacgctcc tgcctcagt
 360
 gaatcttcag tcta
 374

<210> 326
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 326
 Met Lys His Leu Lys Pro Gly Asp Pro Glu Ala His Ser Glu Pro Ser
 1 5 10 15
 Gly Cys Asp Gln Ile Glu Phe Pro Ser Lys Ser Thr Ser Arg Thr Leu
 20 25 30
 Ser Gly Lys Ser Ser Ala Gly Val Gly Ile Pro Trp Glu Gln Ser Ser
 35 40 45
 Lys Leu Phe Pro Ala Pro Ala Ser Pro His Ser His Asp Thr Gln Thr
 50 55 60
 Cys Ala Arg Pro Gly Pro Arg Ser Pro Cys Gln Gly Pro Gln Pro Val
 65 70 75 80
 Arg Cys Phe Leu Gly Gly Ser Ser Ala Ile Ser Pro Ala Ala Ala Leu
 85 90 95
 Cys Phe Pro Leu Leu Pro Arg Pro Pro Phe Thr Arg
 100 105

<210> 327
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 327
 cactataaaa tccagtttgg ggcccgtgtt ctttctatt ggtctgtcag gtgaaaaact
 60

ccggctgggg gaaaagcgtc cgggtggtttg ttggtaaaga gggcgctga tgggctctgg
120
ggaatggagg atggcgcacc ggctgtgggt ggaactgtga aacggggggg ggcagtgccg
180
gggtagtgtg cctgctgggtc tggttttggg atcctgggct ggagaaatgc gatccaaaag
240
agctcgggat gggctcagag cgaccacga aaataccagg ggccaagtaa aatgaaccca
300
ccctttaaca gtgcacaaag cgctggcaca cgggtccacgt ctggtgacgc aggctgcccc
360
aagcgtcca accattttgc aaacctggga gagcaagagg ggctctgcag gtctagccgc
420
cgccctgtc ccactctggc cagccggagt ttttcaccta cagaccaata ggaaagaaca
480
cgggccccaa actggatttt atagtctgag ctctcagcat ctaaggaatg atatgcc
538

<210> 328

<211> 125

<212> PRT

<213> Homo sapiens

<400> 328

Met	Val	Gly	Ala	Leu	Arg	Ala	Ala	Cys	Val	Thr	Arg	Arg	Gly	Pro	Cys
1				5					10					15	
Ala	Ser	Ala	Leu	Cys	Thr	Val	Lys	Gly	Trp	Val	His	Phe	Thr	Trp	Pro
			20					25					30		
Leu	Val	Phe	Ser	Trp	Val	Ala	Leu	Ser	Pro	Ser	Arg	Ala	Leu	Leu	Asp
		35					40					45			
Arg	Ile	Ser	Pro	Ala	Gln	Asp	Pro	Lys	Thr	Arg	Pro	Ala	Gly	Gln	Leu
	50					55					60				
Pro	Arg	His	Cys	His	Pro	Pro	Phe	Pro	Gln	Ser	Thr	His	Ser	Arg	Cys
65					70					75				80	
Ala	Ile	Leu	His	Ser	Pro	Glu	Pro	Ile	Thr	His	Pro	Leu	Tyr	Gln	Gln
				85					90					95	
Thr	Thr	Gly	Arg	Phe	Ser	Pro	Ser	Arg	Ser	Phe	Ser	Pro	Asp	Arg	Pro
			100					105					110		
Ile	Gly	Lys	Asn	Thr	Gly	Pro	Lys	Leu	Asp	Phe	Ile	Val			
		115					120					125			

<210> 329

<211> 407

<212> DNA

<213> Homo sapiens

<400> 329

tccggagagt tccctcccca ggaattcctt ctaagaatcc atgtggaaat agagcctgaa
60
gctcttcagt ctttctgctc cactgagcag tgttttcctg atacccttg taccctgcca
120
gcagcctcgt tatgactcct aactccattg cctccatgg cccctgggcg ctctctctct
180
ctttctctcc aggtagtaga gcactgcttc tggcttcttg tgcacagaag ggtttccac
240

agctgagagc tgggctccta ctgacatagt tatttccttt atatcctgcc ccaccttctt
 300
 ctggtagcac acagcaacct tgcatagttag ctggtatcat taccttccca atcaacaggc
 360
 cttgatttct tataggactt tttctctcag atttacattg cttcttt
 407

<210> 330

<211> 113

<212> PRT

<213> Homo sapiens

<400> 330

Met	Ile	Pro	Ala	Thr	Met	Gln	Gly	Cys	Cys	Val	Leu	Pro	Glu	Glu	Gly
1				5				10					15		
Gly	Ala	Gly	Tyr	Lys	Gly	Asn	Asn	Tyr	Val	Ser	Arg	Ser	Pro	Ala	Leu
			20				25					30			
Ser	Cys	Gly	Lys	Pro	Phe	Cys	Ala	Gln	Glu	Ala	Arg	Ser	Ser	Ala	Leu
		35				40					45				
Leu	Pro	Gly	Glu	Lys	Glu	Arg	Glu	Ser	Ala	Gln	Gly	Pro	Trp	Arg	Ala
	50					55					60				
Met	Glu	Leu	Gly	Val	Ile	Thr	Arg	Leu	Leu	Ala	Gly	Tyr	Gln	Gly	Tyr
65				70						75				80	
Gln	Glu	Asn	Thr	Ala	Gln	Trp	Ser	Arg	Lys	Thr	Glu	Glu	Leu	Gln	Ala
			85						90					95	
Leu	Phe	Pro	His	Gly	Phe	Leu	Glu	Gly	Ile	Pro	Gly	Glu	Gly	Thr	Leu
		100						105					110		

Arg

<210> 331

<211> 523

<212> DNA

<213> Homo sapiens

<400> 331

tgtaccgaac ctgctggtct cgagggcctt gctgggctcg tcgtacgcac agctgacgaa
 60
 tccaccggcc cccatcccgg cgccactttc gctgaggcca tggagtcgat cggagccagc
 120
 tacgacggat cggccggggt ggccggaagt cacgtcggcg tcgatgtgcc cgtgacaagg
 180
 ttcgacgcag cggctgaact cttcgtcgaa ttgttgaaca ccacgagcct ggttgaagag
 240
 gacatcgccc gtcagatcga cgcggcgcca gcctccctgg ccagaccag ccagcgcgga
 300
 tcggccctag ccgagatggc agcagcacgt gcgctatggc cagtggggtc acggtcgtcc
 360
 ctgcccacga tcggtaccct ctcgtcgggtg gaaaagctca acgccgcagc cgcacgagaa
 420
 ttctgggccc cgcactggac gatctccgat gccgtgctgg tggttgccgg agagggagtc
 480
 gaggacctcg acttgtcaat attcaaggag tggacgacca gct
 523

<210> 332
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 332
 Cys Thr Glu Pro Ala Gly Leu Glu Gly Leu Ala Gly Leu Val Val Arg
 1 5 10 15
 Thr Ala Asp Glu Ser Thr Gly Pro His Pro Gly Ala Thr Phe Ala Glu
 20 25 30
 Ala Met Glu Ser Ile Gly Ala Ser Tyr Asp Gly Ser Ala Gly Leu Ala
 35 40 45
 Gly Ser His Val Gly Val Asp Val Pro Val Thr Arg Phe Asp Ala Ala
 50 55 60
 Ala Glu Leu Phe Val Glu Leu Leu Asn Thr Thr Ser Leu Val Glu Glu
 65 70 75 80
 Asp Ile Ala Arg Gln Ile Asp Ala Ala Arg Ala Ser Leu Ala Gln Thr
 85 90 95
 Ser Gln Arg Gly Ser Ala Leu Ala Glu Met Ala Ala Ala Arg Ala Leu
 100 105 110
 Trp Pro Val Gly Ser Arg Ser Ser Leu Pro Thr Ile Gly Thr Leu Ser
 115 120 125
 Ser Val Glu Lys Leu Asn Ala Ala Ala Arg Glu Phe Trp Ala Ala
 130 135 140
 His Trp Thr Ile Ser Asp Ala Val Leu Val Val Ala Gly Glu Gly Val
 145 150 155 160
 Glu Asp Leu Asp Leu Ser Ile Phe Lys Glu Trp Thr Thr Ser
 165 170

<210> 333
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 333
 nntgttcgtc gtgtcgaccc ggaactcaag gccagcgga tgacggtgaa ggtgccaacc
 60
 gatccccatc accgcccggg agttccattg aagtctgcga aggaccgtat ggacatcatt
 120
 tctgcttacc gagaactcgg aagctatcgc gccgcagccg aggtgtgcgg caccaccac
 180
 aagaccgtca agcgggtggt cgatcggttt gaagccggcg atccaccac cggtggcaag
 240
 gaacggggccc gcaactacga tgcgggtggcc cagctcgtcg cgcagcgagt cgcgcggtca
 300
 cacggccgga tcaactgcaa acggctgcta ccggtagcgc gagcggcagg atatgagggg
 360
 tcggcgcgga at
 372

<210> 334
 <211> 88
 <212> PRT

<213> Homo sapiens

<400> 334

```

Met Asp Ile Ile Ser Ala Tyr Arg Glu Leu Gly Ser Tyr Arg Ala Ala
 1           5           10           15
Ala Glu Val Cys Gly Thr Thr His Lys Thr Val Lys Arg Val Val Asp
           20           25           30
Arg Phe Glu Ala Gly Asp Pro Pro Thr Gly Gly Lys Glu Arg Ala Arg
           35           40           45
Asn Tyr Asp Ala Val Ala Gln Leu Val Ala Gln Arg Val Ala Arg Ser
           50           55           60
His Gly Arg Ile Thr Ala Lys Arg Leu Leu Pro Val Ala Arg Ala Ala
65           70           75           80
Gly Tyr Glu Gly Ser Ala Arg Asn
           85

```

<210> 335

<211> 356

<212> DNA

<213> Homo sapiens

<400> 335

```

gtgcacgcct tgctgggcga gggcgatgcg cctgcgcgca ccttcgtgga cggtagcttt
60
ggcaggggag ggcattcgcg gctcatcctg cagcggttgg ggccgcaagg ccgcctgggtg
120
gcgttcgaca aggacaccga agccattcaa gcagcggcgc gcatcacgga tgcgcgcttt
180
tccatcnggc accagggggt cagccatctc ggggaactgc ccgccgccag cgtgtccggt
240
gtgctgctgg acctgggcgt gagctccccg cagatcgacg acccccagcg cgggttcagt
300
tttcgtttcg atgggtccgt ggacatgcgc atggacacca ctccgatgca tggatg
356

```

<210> 336

<211> 118

<212> PRT

<213> Homo sapiens

<400> 336

```

Val His Ala Leu Leu Gly Glu Gly Asp Ala Pro Ala Arg Thr Phe Val
 1           5           10           15
Asp Gly Thr Phe Gly Arg Gly Gly His Ser Arg Leu Ile Leu Gln Arg
           20           25           30
Leu Gly Pro Gln Gly Arg Leu Val Ala Phe Asp Lys Asp Thr Glu Ala
           35           40           45
Ile Gln Ala Ala Ala Arg Ile Thr Asp Ala Arg Phe Ser Ile Xaa His
           50           55           60
Gln Gly Phe Ser His Leu Gly Glu Leu Pro Ala Ala Ser Val Ser Gly
65           70           75           80
Val Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Ile Asp Asp Pro Gln
           85           90           95
Arg Gly Phe Ser Phe Arg Phe Asp Gly Pro Leu Asp Met Arg Met Asp

```

100
Thr Thr Pro Met His Gly
115

105

110

<210> 337
<211> 447
<212> DNA
<213> Homo sapiens

<400> 337
cagcctctct ccgaccgcgc cgggtgtgaag cacgggcatg ccggtgtgca agtggcacca
60
cagccaaaac agcgagctca cacttcaaac tccttcaaag accccaggcc tctgtaagaa
120
ccgctcatct ctgtgccac agctcccccg cttccatgtg acccagaaat ggaaccacgc
180
agcagaggcg gggatcacag gtgaagcagc tgtgaacatt tgcttcaggc ttctgtgcaa
240
acaggcgcca tcatgtcagc cgggtgagcag gagcaacgtg cgtgggtcag ggggtggcca
300
cacgtccaac ttataagaa atgacagatt ccctgatggc catagggatc tgcagggcca
360
gcagcaggca taggacttcc ggtggccctg cgtcttcac aacactgagt attgtcaggg
420
tttctgtact gtttttacag ccaattg
447

<210> 338
<211> 111
<212> PRT
<213> Homo sapiens

<400> 338
Met Pro Val Cys Lys Trp His His Ser Gln Asn Ser Glu Leu Thr Leu
1 5 10 15
Gln Thr Pro Ser Lys Thr Pro Gly Leu Cys Lys Asn Arg Ser Ser Leu
20 25 30
Cys Pro Gln Leu Pro Arg Phe His Val Thr Gln Lys Trp Asn His Ala
35 40 45
Ala Glu Ala Gly Ile Thr Gly Glu Ala Ala Val Asn Ile Cys Phe Arg
50 55 60
Leu Leu Cys Lys Gln Ala Pro Ser Cys Gln Pro Val Ser Arg Ser Asn
65 70 75 80
Val Arg Gly Ser Gly Gly Gly His Thr Ser Asn Phe Ile Arg Asn Asp
85 90 95
Arg Phe Pro Asp Gly His Arg Asp Leu Gln Gly Gln Gln Gln Ala
100 105 110

<210> 339
<211> 588
<212> DNA
<213> Homo sapiens

<400> 339

tctagaatga agcgctgtat cctagcaccg gcagacgtac caagactatc aagggcggtca
 60
 gatcgtttat cctgcagttg ccattcatca gacaaatcca gtggaacca atggaagaca
 120
 ccgacctgca agcgctgatg gccagactcg aattgcta atgacggggtc gagcaactta
 180
 agagtcaaaa cggactccta ttagctcagg aaaagacctg ggcgcganaa cgcgctcacc
 240
 tcattgaaaa aaacgaaatc gcccggcgta aggtcgaatc gatgatttcg cgctgaagg
 300
 ccctggagca agactatgag ttaagcaata gcgttacgtg cagatcctcg acaaagaata
 360
 ttcgatcatc tgccccccagg aagaacgcag cacctgggtga gtgctgcccg ctacctggaa
 420
 ggccaaaagg cgtgaaatcc gcagcagcgg caaagtcacg ggtgccgacc gcatcgccgt
 480
 gatggccgcg ctgaacatca cccacgatct gctgcataag caggaacggc ctgacgttca
 540
 ggccagcggc tcaacgcgcg agcaagtgcg tgacctgctg gaacgcgt
 588

<210> 340

<211> 123

<212> PRT

<213> Homo sapiens

<400> 340

Met	Glu	Asp	Thr	Asp	Leu	Gln	Ala	Leu	Met	Ala	Arg	Leu	Glu	Leu	Leu
1				5					10					15	
Ile	Asp	Arg	Val	Glu	Gln	Leu	Lys	Ser	Gln	Asn	Gly	Leu	Leu	Leu	Ala
			20					25					30		
Gln	Glu	Lys	Thr	Trp	Ala	Arg	Xaa	Arg	Ala	His	Leu	Ile	Glu	Lys	Asn
			35				40					45			
Glu	Ile	Ala	Arg	Arg	Lys	Val	Glu	Ser	Met	Ile	Ser	Arg	Leu	Lys	Ala
			50			55					60				
Leu	Glu	Gln	Asp	Tyr	Glu	Leu	Ser	Asn	Ser	Val	Thr	Cys	Arg	Ser	Ser
65					70					75				80	
Thr	Lys	Asn	Ile	Arg	Ser	Ser	Ala	Pro	Arg	Lys	Asn	Ala	Ala	Pro	Gly
			85					90						95	
Glu	Cys	Cys	Pro	Leu	Pro	Gly	Arg	Pro	Lys	Gly	Val	Lys	Ser	Ala	Ala
			100					105					110		
Ala	Ala	Lys	Ser	Ser	Val	Pro	Thr	Ala	Ser	Pro					
			115					120							

<210> 341

<211> 401

<212> DNA

<213> Homo sapiens

<400> 341

ngccgcgcgg cctacctgct gtacctggcc tatgccacct ggcgtagacc ctcggccttt
 60
 gcaatgaacg acacgccgac agttgcgacc gcgcgcagcc tgatcctgcg tggtctcttg
 120

ctgaacattc ttaaccccaa gctgacaatt ttcttcctgg ccttcctgcc tcaattcgta
 180
 acgccaggcg gcaccgcgcc ggccttgacag atgctggtac tgagcggcgt gttcatggcg
 240
 atgacgcttg cagtgtttgt gctgtatggc ctgttggcga atgtgtttcg tcgtgcagtg
 300
 gtcgagtcgc cacgtgtgca gaactggctg cgacgcagtt ttgccacggc ctttgccggg
 360
 ctgggggtga acctggcggt tgcgcagcgc tgaggacgcg t
 401

<210> 342

<211> 130

<212> PRT

<213> Homo sapiens

<400> 342

Xaa	Arg	Ala	Ala	Tyr	Leu	Leu	Tyr	Leu	Ala	Tyr	Ala	Thr	Trp	Arg	Asp
1				5					10					15	
Arg	Ser	Ala	Phe	Ala	Met	Asn	Asp	Thr	Pro	Thr	Val	Ala	Thr	Ala	Arg
			20					25				30			
Ser	Leu	Ile	Leu	Arg	Gly	Phe	Leu	Leu	Asn	Ile	Leu	Asn	Pro	Lys	Leu
		35					40					45			
Thr	Ile	Phe	Phe	Leu	Ala	Phe	Leu	Pro	Gln	Phe	Val	Thr	Pro	Gly	Gly
	50					55					60				
Thr	Ala	Pro	Ala	Leu	Gln	Met	Leu	Val	Leu	Ser	Gly	Val	Phe	Met	Ala
65				70					75					80	
Met	Thr	Leu	Ala	Val	Phe	Val	Leu	Tyr	Gly	Leu	Leu	Ala	Asn	Val	Phe
				85					90					95	
Arg	Arg	Ala	Val	Val	Glu	Ser	Pro	Arg	Val	Gln	Asn	Trp	Leu	Arg	Arg
			100					105					110		
Ser	Phe	Ala	Thr	Ala	Phe	Ala	Gly	Leu	Gly	Leu	Asn	Leu	Ala	Phe	Ala
		115					120						125		
Gln	Arg														
															130

<210> 343

<211> 389

<212> DNA

<213> Homo sapiens

<400> 343

gtgttgcgca actacatggc gtccttgccg ttcagcgtgg tcgagtcggc gcgcacgcac
 60
 ggggtgctcca acttcacgat cttctggaag ctgatcgccc cgatggcgat gccggcgatg
 120
 gcggcgcttcg cgaccctgca gttcctgtgg gtgtggaacg acctgctcat cgccaagctc
 180
 ttctcacca acgacaaccc cacggtgatc gtcaagctcc aacagctttc cnngggcccc
 240
 aaggcccagg gtgcggagct gctgacggcg ggcgccttca tctccatcgt gctacccatg
 300
 atcgtcttct tcgtgctcca gaacttctg gtgcgcggta tgacgtcggg tgccgtcaag
 360

gggtgaccgc tcaactgcag tggccccggg
389

<210> 344
<211> 121
<212> PRT
<213> Homo sapiens

<400> 344
Val Leu Arg Asn Tyr Met Ala Ser Leu Pro Phe Ser Val Val Glu Ser
1 5 10 15
Ala Arg Ile Asp Gly Cys Ser Asn Phe Gln Ile Phe Trp Lys Leu Ile
20 25 30
Ala Pro Met Ala Met Pro Ala Met Ala Ala Phe Ala Thr Leu Gln Phe
35 40 45
Leu Trp Val Trp Asn Asp Leu Leu Ile Ala Lys Leu Phe Leu Thr Asn
50 55 60
Asp Asn Pro Thr Val Ile Val Lys Leu Gln Gln Leu Ser Xaa Gly Pro
65 70 75 80
Lys Ala Gln Gly Ala Glu Leu Leu Thr Ala Gly Ala Phe Ile Ser Ile
85 90 95
Val Leu Pro Met Ile Val Phe Phe Val Leu Gln Asn Phe Leu Val Arg
100 105 110
Gly Met Thr Ser Gly Ala Val Lys Gly
115 120

<210> 345
<211> 360
<212> DNA
<213> Homo sapiens

<400> 345
ctagtacttt atgctgatgg tgaacgtcgt tacatccttg cccctaaagg catggttgct
60
gggtgatgtga tccaatctgg tgaagatgca tcaattaaag taggtaactg cttaccgatg
120
cgtaatatcc cagttggtac aacagtacac gctgtagaaa tgaaacctgc taaaggtgca
180
caaattgcac gttctgctgg ttcttacagc caaattatag ctctgatgg tgcttacgtt
240
actctacgtt tacgtagtgg tgaaatgcgt aaaatccctg ctgagtgtcg tgcaacaatc
300
gggtgaagttg gtaatgcaga acatatgcta cgtcaactag gtaaagctgg tgctacgcgt
360

<210> 346
<211> 120
<212> PRT
<213> Homo sapiens

<400> 346
Leu Val Leu Tyr Ala Asp Gly Glu Arg Arg Tyr Ile Leu Ala Pro Lys
1 5 10 15
Gly Met Val Ala Gly Asp Val Ile Gln Ser Gly Glu Asp Ala Ser Ile

```

          20          25          30
Lys Val Gly Asn Cys Leu Pro Met Arg Asn Ile Pro Val Gly Thr Thr
          35          40          45
Val His Ala Val Glu Met Lys Pro Ala Lys Gly Ala Gln Ile Ala Arg
          50          55          60
Ser Ala Gly Ser Tyr Ser Gln Ile Ile Ala Arg Asp Gly Ala Tyr Val
        65          70          75          80
Thr Leu Arg Leu Arg Ser Gly Glu Met Arg Lys Ile Pro Ala Glu Cys
          85          90          95
Arg Ala Thr Ile Gly Glu Val Gly Asn Ala Glu His Met Leu Arg Gln
          100          105          110
Leu Gly Lys Lys Ala Gly Ala Thr Arg
          115          120

```

<210> 347
 <211> 565
 <212> DNA
 <213> Homo sapiens

```

<400> 347
accggtgatg ccaaaggtgc tgtgacaagg ggattcatcg gttcgggcaa ggtcgtcacg
60
gcagctgccg tcatcatgat ttcggtgttc gtcttcttca tccccgaggg catgaacgcc
120
atcaaggaaa tcgccttggc cctggccgtc gggatcctca cggatgcctt cttggtgcgg
180
atgaccctcg tcccggccgt gatggccctg ctaggtgaca aggcattggtg gttgcccggg
240
tggctggatc gacgcctacc ccgcctcgac atcgagggag aagggatcac ccacgaggaa
300
aagctggccg cctggcccac agcggatcac accgaggccc tgcacgccga ggggatcggg
360
gtggaggggc tcttcgaagg cctcgatctg cacgtcgaac cgcgtcaggt gcaagccgtc
420
gtcggatcgc agaacagtgt ctcgccgtc ctgctggcga tcgggggacg gctgcccttg
480
gatcacggcc ggatgaggtc gggaggattg ctgctaccgc agcgggcttc cagagtgcgt
540
cgggtgacgt ggttcctcga cgcgt
565

```

<210> 348
 <211> 188
 <212> PRT
 <213> Homo sapiens

```

<400> 348
Thr Gly Asp Ala Lys Gly Ala Val Thr Arg Gly Phe Ile Gly Ser Gly
1      5      10      15
Lys Val Val Thr Ala Ala Ala Val Ile Met Ile Ser Val Phe Val Phe
20      25      30
Phe Ile Pro Glu Gly Met Asn Ala Ile Lys Glu Ile Ala Leu Ala Leu
35      40      45
Ala Val Gly Ile Leu Thr Asp Ala Phe Leu Val Arg Met Thr Leu Val

```



```

      50              55              60
Pro Ala Val Met Ala Leu Leu Gly Asp Lys Ala Trp Trp Leu Pro Gly
65              70              75              80
Trp Leu Asp Arg Arg Leu Pro Arg Leu Asp Ile Glu Gly Glu Gly Ile
      85              90              95
Thr His Glu Glu Lys Leu Ala Ala Trp Pro Thr Ala Asp His Thr Glu
      100              105              110
Ala Leu His Ala Glu Gly Ile Gly Val Glu Gly Leu Phe Glu Gly Leu
      115              120              125
Asp Leu His Val Glu Pro Arg Gln Val Gln Ala Val Val Gly Ser Gln
      130              135              140
Asn Ser Val Ser Ala Val Leu Leu Ala Ile Gly Gly Arg Leu Pro Leu
      145              150              155              160
Asp His Gly Arg Met Arg Ser Gly Gly Leu Leu Leu Pro Glu Arg Ala
      165              170              175
Ser Arg Val Arg Arg Val Thr Trp Phe Leu Asp Ala
      180              185

```

<210> 349

<211> 339

<212> DNA

<213> Homo sapiens

<400> 349

```

ntgctggcca cggataatga ccgtactctg cgtgatgtcg ttgccgctga ccctacccat
60
gagctcggtt cggctaccgc tcatacgttt ggggacaatt tgccgttcct tcttaaactg
120
ctcgcggcag aagagccact atcgttgcag gctcatccca gtttggcgca agcacaggaa
180
gggtacgggc gggagaatcg caaaggggtg ccattagatg cccagaccg gaattaccac
240
gatccaacc ataaaccgga gcttattggt gggctgacgc gattccacgc actagccggc
300
ttcctgaac cacaacgcac acttgagctt tttgacgcg
339

```

<210> 350

<211> 113

<212> PRT

<213> Homo sapiens

<400> 350

```

Xaa Leu Ala Thr Asp Asn Asp Arg Thr Leu Arg Asp Val Val Ala Ala
1      5      10      15
Asp Pro Thr His Glu Leu Gly Ser Ala Thr Ala His Thr Phe Ala Asp
      20      25      30
Asn Leu Pro Phe Leu Leu Lys Leu Leu Ala Ala Glu Glu Pro Leu Ser
      35      40      45
Leu Gln Ala His Pro Ser Leu Ala Gln Ala Gln Glu Gly Tyr Gly Arg
      50      55      60
Glu Asn Arg Lys Gly Val Pro Leu Asp Ala Pro Asp Arg Asn Tyr His
65      70      75      80
Asp Pro Asn His Lys Pro Glu Leu Ile Val Gly Leu Thr Arg Phe His

```

85 90 95
 Ala Leu Ala Gly Phe Arg Glu Pro Gln Arg Thr Leu Glu Leu Phe Asp
 100 105 110
 Ala

<210> 351
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 351
 gcgcgccccca gtgccgagac ccgggggttc aggagccggc cccgggagag aagagtgcgg
 60
 cggcgggacgg agaaaacaac tccaaagttg gcgaaaggca ccgcccctac tcccgggctg
 120
 ccgcccgttc cccgccccca gccctggcat ccagagtacg ggtcgagccc gnggccatgg
 180
 agcccccttg gggaggcggc accagggagc ctgggccccg gggctccgcc gcgaccccat
 240
 cgggtagacc acagaagctc cgggaccott ccggcacctc tggacagccc aggatgctgt
 300
 tggecaccn ntctctctcc tcctccttgg aggcgtctg gcccatccag accg
 354

<210> 352
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 352
 Ala Arg Pro Ser Ala Glu Thr Arg Gly Phe Arg Ser Arg Pro Arg Glu
 1 5 10 15
 Arg Arg Val Arg Arg Arg Thr Glu Lys Thr Thr Pro Lys Leu Ala Lys
 20 25 30
 Gly Thr Ala Pro Thr Pro Gly Leu Pro Pro Pro Arg Pro Gln Pro
 35 40 45
 Trp His Pro Glu Tyr Gly Ser Ser Pro Xaa Pro Trp Ser Pro Pro Gly
 50 55 60
 Glu Ala Ala Pro Gly Ser Leu Gly Pro Gly Ala Pro Pro Arg Pro His
 65 70 75 80
 Arg Val Asp His Arg Ser Ser Gly Thr Leu Pro Ala Pro Leu Asp Ser
 85 90 95
 Pro Gly Cys Cys Trp Pro Pro Xaa Pro Pro Pro Pro Trp Arg Arg
 100 105 110
 Ser Gly Pro Ser Arg Pro
 115

<210> 353
 <211> 1469
 <212> DNA
 <213> Homo sapiens

<400> 353

nntcatgaag gcttgaactt gcgtgatctt cagcctgcgg acctggcggg tgacggcggt
60
attgagccgg tggacctcgt ggtcggagat gtctctttta tctccttgac gatgatcctt
120
gaacccatth cagctgttgt cagcccacac ggccctcatgc tgttgctggg gaagcctcaa
180
tttgaggttg gttgcaaggg tttgggagcc catggcggtg tcacggaccc ggccctgcgc
240
ttgcaggcca tcgcgggtgt catggcagca gcggtagatt tgggttgggc tatgcgtgac
300
gagtgcgata gcccggtgcc cgggcaggat ggaaacgttg agcacttcgt cttgctggaa
360
cgtacgggtc ggtgacagac gtccgggcat atcatgggcc gctactgtgg tcttgatgaac
420
gacacgagcc cttcgagata cgttgctgtc gtacccatg ccacgcggga cgacgctttt
480
gacgcggctg ccgaattcat ctctgaaatg gcggggcgag acattgggtg cgcggttccg
540
gatgatcagg tgaagccgat gtcaagcaag ctgccaggga tcgatcttga aagcttggga
600
gagttcgccc acgaggcgga ggtggtcgtc gtctttggcg gcgacggcac gatcttgcca
660
gctgctgaat ggtcattacc tcgccacgtt cccatgattg gcgtcaacct tggccatgtc
720
ggttttctgg ctgagctgga gcgctccgat atggcggatc tagtgaacaa ggtgtgttcg
780
cgcgactaca ccgttgagga tcgcctcgtg cttaaaacca ccgtcacga gcattccgga
840
caacaccgtt ggagttcttt tgccgtcaac gagttgtctc tggaaaaggc agcccgccgg
900
cgcgtgctcg acgttctggc gtctgtcgac gagttgccgg tgcaacgctg gagttgcgac
960
gggatcctgg tctcgacccc gaccggatcg acggcctacg cgttctcagc tggcggcccg
1020
gtcatgtggc ccgatctcga cgcctatgctc atggtgccgt tgagcgotca cgctctcttt
1080
gtctgaccgc tggtcattgag ccagctgct cgagtggacc ttgacatcca gccagacggt
1140
tcagaatcgg cggttctgtg gtgcgacggg cgcgatcgt gcaccgtacg accgggggaa
1200
agaatcaccg tcgtccgcca tcccgaacgt ctgcgcattg ctgctctggc cgcgcagccc
1260
ttcacatcgc gtctgggtcaa gaagtttgag ctcccgttca gcgggtggcg tcagggtcgt
1320
gaccgtcatc acctagagga gacttcgtga tacgtagtgt gcgaattcgt ggactcggcg
1380
tcatcgatga gacggtcctc gaaccctcat ccgcgctgac ggcagtcacc ggcgagaccg
1440
gcgcgggaaa gaccatggtg gtcaccggt
1469

<210> 354

<211> 318

<212> PRT

<213> Homo sapiens

<400> 354

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Met Gly Arg Tyr Cys Gly Leu Val Asn Asp Thr Ser Pro Ser Arg Tyr
 1           5           10           15
Val Val Val Val Thr His Ala Thr Arg Asp Asp Ala Phe Asp Ala Ala
 20           25           30
Ala Glu Phe Ile Ser Glu Met Ala Gly Arg Asp Ile Gly Cys Ala Val
 35           40           45
Pro Asp Asp Gln Val Lys Pro Met Ser Ser Lys Leu Pro Gly Ile Asp
 50           55           60
Leu Glu Ser Leu Gly Glu Phe Ala His Glu Ala Glu Val Val Val Val
 65           70           75           80
Phe Gly Gly Asp Gly Thr Ile Leu Arg Ala Ala Glu Trp Ser Leu Pro
 85           90           95
Arg His Val Pro Met Ile Gly Val Asn Leu Gly His Val Gly Phe Leu
100           105           110
Ala Glu Leu Glu Arg Ser Asp Met Ala Asp Leu Val Asn Lys Val Cys
115           120           125
Ser Arg Asp Tyr Thr Val Glu Asp Arg Leu Val Leu Lys Thr Thr Val
130           135           140
Thr Glu His Ser Gly Gln His Arg Trp Ser Ser Phe Ala Val Asn Glu
145           150           155           160
Leu Ser Leu Glu Lys Ala Ala Arg Arg Arg Met Leu Asp Val Leu Ala
165           170           175
Ser Val Asp Glu Leu Pro Val Gln Arg Trp Ser Cys Asp Gly Ile Leu
180           185           190
Val Ser Thr Pro Thr Gly Ser Thr Ala Tyr Ala Phe Ser Ala Gly Gly
195           200           205
Pro Val Met Trp Pro Asp Leu Asp Ala Met Leu Met Val Pro Leu Ser
210           215           220
Ala His Ala Leu Phe Ala Arg Pro Leu Val Met Ser Pro Ala Ala Arg
225           230           235           240
Val Asp Leu Asp Ile Gln Pro Asp Gly Ser Glu Ser Ala Val Leu Trp
245           250           255
Cys Asp Gly Arg Arg Ser Cys Thr Val Arg Pro Gly Glu Arg Ile Thr
260           265           270
Val Val Arg His Pro Asp Arg Leu Arg Ile Ala Arg Leu Ala Ala Gln
275           280           285
Pro Phe Thr Ser Arg Leu Val Lys Lys Phe Glu Leu Pro Val Ser Gly
290           295           300
Trp Arg Gln Gly Arg Asp Arg His His Leu Glu Glu Thr Ser
305           310           315

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<210> 355

<211> 558

<212> DNA

<213> Homo sapiens

<400> 355

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nggatccac ctctggaat ggaaaccac ataccagttc tcttctcga tttgaatgcg
60
gatgacctca gtgccaatga gcagcttggt ggccccatg catccggcgt gaactccatc
120

```

ctgccccagg agcatggcag ccagtttttc tacctgcca tcataaagca cagtgatgat
 180
 gaggtttcag ccacagcctc ttgggattcc tcgggtgcag attctgttca cttgaatggg
 240
 gtcacaccac agaatgaaag gatttaccta attgtgaaaa ccacagttca actcagccac
 300
 cctgctgcta tggagttagt attacgaaaa cgaattgcag ccaatattta caacaaacag
 360
 agtttcacgc agagtttgaa gaggagaata tccctgaaaa atatatttta ttctgtggt
 420
 gtaacctatg aaatagtatc caatatacca aaggcaactg aggagataga ggaccgggaa
 480
 acgctggctc tcctggcagc aaggagtga aacgaaggca catcagatgg gaagacgtac
 540
 attgagaagt acactcga
 558

<210> 356

<211> 186

<212> PRT

<213> Homo sapiens

<400> 356

Xaa	Ile	Pro	Pro	Pro	Gly	Met	Glu	Thr	His	Ile	Pro	Val	Leu	Phe	Leu
1				5				10					15		
Asp	Leu	Asn	Ala	Asp	Asp	Leu	Ser	Ala	Asn	Glu	Gln	Leu	Val	Gly	Pro
			20					25					30		
His	Ala	Ser	Gly	Val	Asn	Ser	Ile	Leu	Pro	Lys	Glu	His	Gly	Ser	Gln
			35				40					45			
Phe	Phe	Tyr	Leu	Pro	Ile	Ile	Lys	His	Ser	Asp	Asp	Glu	Val	Ser	Ala
	50					55				60					
Thr	Ala	Ser	Trp	Asp	Ser	Ser	Val	His	Asp	Ser	Val	His	Leu	Asn	Gly
65					70				75					80	
Val	Thr	Pro	Gln	Asn	Glu	Arg	Ile	Tyr	Leu	Ile	Val	Lys	Thr	Thr	Val
				85				90						95	
Gln	Leu	Ser	His	Pro	Ala	Ala	Met	Glu	Leu	Val	Leu	Arg	Lys	Arg	Ile
			100					105					110		
Ala	Ala	Asn	Ile	Tyr	Asn	Lys	Gln	Ser	Phe	Thr	Gln	Ser	Leu	Lys	Arg
		115				120					125				
Arg	Ile	Ser	Leu	Lys	Asn	Ile	Phe	Tyr	Ser	Cys	Gly	Val	Thr	Tyr	Glu
	130					135					140				
Ile	Val	Ser	Asn	Ile	Pro	Lys	Ala	Thr	Glu	Glu	Ile	Glu	Asp	Arg	Glu
145				150					155					160	
Thr	Leu	Ala	Leu	Leu	Ala	Ala	Arg	Ser	Glu	Asn	Glu	Gly	Thr	Ser	Asp
				165					170					175	
Gly	Lys	Thr	Tyr	Ile	Glu	Lys	Tyr	Thr	Arg						
			180					185							

<210> 357

<211> 323

<212> DNA

<213> Homo sapiens

<400> 357

acgcgtgcgt gtgttggtgtg agtcgggtgt gtgcatgcgt gtgggtgtgc agcaggtggg
 60
 gtacgatcag gctgaaggct gatcaggcac aaggctctgg gggagagccc tggttccagg
 120
 cctgggggtca gagcagcagg ggccagaaag acggcagggg tgagcactgc acccgctggg
 180
 cagggcaggg ccacagaagg cagggcatgg aggccacgtg aagggttga cagagtggat
 240
 ggatgtctcc ggaagcacct gcgtggccca gtcagcagga tcagactcgc atgtgtcagg
 300
 gtcaccatgg gtcagcgagg atn
 323

<210> 358
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 358
 Met Val Thr Leu Thr His Ala Ser Leu Ile Leu Leu Thr Gly Pro Arg
 1 5 10 15
 Arg Cys Phe Arg Arg His Pro Ser Thr Leu Ser Ser Pro Ser Arg Gly
 20 25 30
 Leu His Ala Leu Pro Ser Val Ala Leu Pro Cys Pro Ala Gly Ala Val
 35 40 45
 Leu Thr Pro Ala Val Phe Leu Ala Pro Ala Ala Leu Thr Pro Gly Leu
 50 55 60
 Glu Pro Gly Leu Ser Pro Arg Ala Leu Cys Leu Ile Ser Leu Gln Pro
 65 70 75 80
 Asp Arg Thr Pro Pro Ala Ala His Pro His Ala Cys Thr His Pro Thr
 85 90 95
 His Thr Thr His Ala Arg
 100

<210> 359
 <211> 265
 <212> DNA
 <213> Homo sapiens

<400> 359
 acgcgtaccg acaagcgccc ggtgatggcc gaccttcgcg aatcgggcgc aatcgagcag
 60
 gatgcggaca tgatcgtctt catctaccgc gacgattact acaacaagga aaattcgccg
 120
 gacaaggggc tggccgagat catcatcggc aagcatcggg ggggccccac cggctcgtgc
 180
 aagctgaagt tcttcggcga gtacaccgt ttgcacaacc tggcccacaa ctcggttggt
 240
 tcgttcgaat aacggatgat tccgg
 265

<210> 360
 <211> 83
 <212> PRT

<213> Homo sapiens

<400> 360

```

Thr Arg Thr Asp Lys Arg Pro Val Met Ala Asp Leu Arg Glu Ser Gly
 1           5           10           15
Ala Ile Glu Gln Asp Ala Asp Met Ile Val Phe Ile Tyr Arg Asp Asp
      20           25           30
Tyr Tyr Asn Lys Glu Asn Ser Pro Asp Lys Gly Leu Ala Glu Ile Ile
      35           40           45
Ile Gly Lys His Arg Gly Gly Pro Thr Gly Ser Cys Lys Leu Lys Phe
      50           55           60
Phe Gly Glu Tyr Thr Arg Phe Asp Asn Leu Ala His Asn Ser Val Gly
65           70           75           80
Ser Phe Glu

```

<210> 361

<211> 453

<212> DNA

<213> Homo sapiens

<400> 361

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gctttgcagg aggaaatctc tatctctggc tgcaagatga ggctgagcta cctgagcagc
60
cggacccctg gctacaaatc tgctctgagg atcagcctca cccacccgac catccccctc
120
aacctcatga aggtgcacct catggtagcg gtggagggcc gcctcttcag gaagtgggtc
180
gctgcagccc cagacctgtc ctattatttc atttgggaca agacagacgt ctacaaccag
240
aagtggtttg ggctttcaga agcctttggt tccgtggggt atgaatatga atcctgcccc
300
gatctaatac tgtgggaaaa aagaacaaca gtgctgcagg gctatgaaat tgacgcgtcc
360
aagcttggag gatggagcct agacaaacat catgccctca acattcaaag tggcatcctg
420
cacaaaggga atggngagaa ccagtttgtg tct
453

```

<210> 362

<211> 151

<212> PRT

<213> Homo sapiens

<400> 362

```

Ala Leu Gln Glu Glu Ile Ser Ile Ser Gly Cys Lys Met Arg Leu Ser
 1           5           10           15
Tyr Leu Ser Ser Arg Thr Pro Gly Tyr Lys Ser Val Leu Arg Ile Ser
      20           25           30
Leu Thr His Pro Thr Ile Pro Phe Asn Leu Met Lys Val His Leu Met
      35           40           45
Val Ala Val Glu Gly Arg Leu Phe Arg Lys Trp Phe Ala Ala Ala Pro
      50           55           60
Asp Leu Ser Tyr Tyr Phe Ile Trp Asp Lys Thr Asp Val Tyr Asn Gln

```

```

65          70          75          80
Lys Val Phe Gly Leu Ser Glu Ala Phe Val Ser Val Gly Tyr Glu Tyr
          85          90          95
Glu Ser Cys Pro Asp Leu Ile Leu Trp Glu Lys Arg Thr Thr Val Leu
          100          105          110
Gln Gly Tyr Glu Ile Asp Ala Ser Lys Leu Gly Gly Trp Ser Leu Asp
          115          120          125
Lys His His Ala Leu Asn Ile Gln Ser Gly Ile Leu His Lys Gly Asn
          130          135          140
Gly Glu Asn Gln Phe Val Ser
145          150

```

<210> 363

<211> 502

<212> DNA

<213> Homo sapiens

<400> 363

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ggtaccaaaa aagtttgcca cagtattcac actccaggtc tccataaacc ttccagatcc
60
gctcacacaa gctggtgttc atttgcttct tctgtaaact gttcaggacc ttcataaaaag
120
cgggtgatgc tgaccggtgc tcaggggcag ctttgcaaga gtcaggctga tgtgtgatgg
180
tgtccccacc accagctact ggagggagga ggtctgaggc ctcagctggg tttgacctga
240
gacacctgct gggatctggg tcaccagctg aaagcacagc catgttctgc cttcccccta
300
gggggctctg ggcgccatgg ctttctgat ctgaccagc actctggggc ttggacagca
360
gtagtgtgat cacttcacct tgcgtctgga ctgagcttct gtgctgcatg tctgggggct
420
tctcaggagc agcatgagcc tctgcggagg aggtatcatt tttcaacaaa aaatcatctg
480
aaaccacctc ttgagaatgc ag
502

```

<210> 364

<211> 136

<212> PRT

<213> Homo sapiens

<400> 364

```

Met Gln His Arg Ser Ser Val Gln Thr Gln Gly Glu Val Ile Thr Leu
1          5          10          15
Leu Leu Ser Lys Ala Gln Ser Ala Gly Ser Asp Gln Glu Ser His Gly
          20          25          30
Ala Gln Ser Pro Leu Gly Glu Gly Gln Asn Met Ala Val Leu Ser Ala
          35          40          45
Gly Asp Pro Asp Pro Ser Arg Cys Leu Arg Ser Asn Pro Ala Glu Ala
          50          55          60
Ser Asp Leu Leu Pro Pro Val Ala Gly Gly Gly Asp Thr Ile Thr His
65          70          75          80
Gln Pro Asp Ser Cys Lys Ala Ala Pro Glu His Arg Ser Gly Ile Thr

```


				85					90					95			
Ala	Phe	Met	Lys	Val	Leu	Asn	Ser	Leu	Gln	Lys	Lys	Gln	Met	Asn	Thr		
			100					105					110				
Ser	Leu	Cys	Glu	Arg	Ile	Trp	Lys	Val	Tyr	Gly	Asp	Leu	Glu	Cys	Glu		
		115					120					125					
Tyr	Cys	Gly	Lys	Leu	Phe	Trp	Tyr										
		130					135										

<210> 365

<211> 333

<212> DNA

<213> Homo sapiens

<400> 365

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atctcaacgg atgcatccat caaggagatg atccccccag gtgctcttgt tatgctcaca
60
ccactgatcg ttgggattct atttgggggt gagaccctct ctggagtcct tgctgggtgcc
120
cttgtctctg gtgttcagat tgccatttct gcatccaaca ctggtgggtgc ctgggacaac
180
gccaagaagt acattgagge tggagtttca gagcatgccca ggacccttgg cccaaaaggt
240
tctgaccctc acaaggcggc tgtcattggt gacaccattg gagatcctct caaggacacg
300
tctggccctt cctcaacat cctcatcaag ctt
333

```

<210> 366

<211> 111

<212> PRT

<213> Homo sapiens

<400> 366

Ile	Ser	Thr	Asp	Ala	Ser	Ile	Lys	Glu	Met	Ile	Pro	Pro	Gly	Ala	Leu		
1				5				10					15				
Val	Met	Leu	Thr	Pro	Leu	Ile	Val	Gly	Ile	Leu	Phe	Gly	Val	Glu	Thr		
		20					25					30					
Leu	Ser	Gly	Val	Leu	Ala	Gly	Ala	Leu	Val	Ser	Gly	Val	Gln	Ile	Ala		
	35					40					45						
Ile	Ser	Ala	Ser	Asn	Thr	Gly	Gly	Ala	Trp	Asp	Asn	Ala	Lys	Lys	Tyr		
	50				55				60								
Ile	Glu	Ala	Gly	Val	Ser	Glu	His	Ala	Arg	Thr	Leu	Gly	Pro	Lys	Gly		
65				70				75					80				
Ser	Asp	Pro	His	Lys	Ala	Ala	Val	Ile	Gly	Asp	Thr	Ile	Gly	Asp	Pro		
			85				90					95					
Leu	Lys	Asp	Thr	Ser	Gly	Pro	Ser	Leu	Asn	Ile	Leu	Ile	Lys	Leu			
		100					105					110					

<210> 367

<211> 381

<212> DNA

<213> Homo sapiens

<400> 367

gcggttcgtcg cactaccgga cgccggcgga acccttgacg agctactcga agcatggaca
 60
 tggcagcagc tcggtgtaca cagcaaaccg gtgngccttg tacgactcga cnncttctgg
 120
 gcaccgctga ccgcgctact caaccacatg accatcgaaa gcttcattcg ccctgaggac
 180
 cgcgccctgc tcgtgatcgc cgataccata catcagctga tggccgatct tgagggatgg
 240
 accccaccac caccgaagtg gcgctcgtga catagaacaa atgattctga ctatggctca
 300
 ttgacatctg cgcagcggct actagctcca ttgacttcaa atcgggcctt ggccgaggct
 360
 cngttcaggt ggcccgaat g
 381

<210> 368

<211> 89

<212> PRT

<213> Homo sapiens

<400> 368

Ala	Phe	Val	Ala	Leu	Pro	Gly	Gly	Gly	Gly	Thr	Leu	Asp	Glu	Leu	Leu
1			5					10					15		
Glu	Ala	Trp	Thr	Trp	Gln	Gln	Leu	Gly	Val	His	Ser	Lys	Pro	Val	Xaa
		20					25					30			
Leu	Val	Arg	Leu	Asp	Xaa	Phe	Trp	Ala	Pro	Leu	Thr	Ala	Leu	Leu	Asn
		35				40				45					
His	Met	Thr	Ile	Glu	Ser	Phe	Ile	Arg	Pro	Glu	Asp	Arg	Ala	Ser	Leu
	50					55				60					
Val	Ile	Ala	Asp	Thr	Ile	His	Gln	Leu	Met	Ala	Asp	Leu	Glu	Gly	Trp
65					70				75					80	
Thr	Pro	Pro	Pro	Pro	Lys	Trp	Arg	Ser							
					85										

<210> 369

<211> 313

<212> DNA

<213> Homo sapiens

<400> 369

gatacatgat cctctcatat cgcacacaca ccgctcccct ctgccgcaat tcgcagacaa
 60
 acttgccgag gcttcacagc aagccgtcaa ggctgcttcc tgtgggctac cgatagtctc
 120
 gtacgcgagt tctcggacat caacgccaac gtcgggcaag atactgtcaa cgccatctac
 180
 acattctacg agcagcaagc gaccagtttc cttcgccagc tgaacgacct cccacccgaa
 240
 gagcttcccg acgtcatcga ggactttcttc cgctgtcca ctgatgtcct tctttaccat
 300
 ttccagcaag ctt
 313

<210> 370

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 370
 Ser Ser His Thr Ala His Thr Pro Leu Pro Ser Ala Ala Ile Arg Arg
 1 5 10 15
 Gln Thr Cys Ala Gly Phe Thr Ala Ser Arg Gln Gly Cys Phe Leu Trp
 20 25 30
 Ala Thr Asp Ser Leu Val Arg Glu Phe Ser Asp Ile Asn Ala Asn Val
 35 40 45
 Gly Gln Asp Thr Val Asn Ala Ile Tyr Thr Phe Tyr Glu Gln Gln Ala
 50 55 60
 Thr Ser Phe Leu Arg Gln Leu Asn Asp Leu Pro Pro Glu Glu Leu Pro
 65 70 75 80
 Asp Val Ile Glu Asp Phe Phe Arg Leu Ser Thr Asp Val Leu Leu Tyr
 85 90 95
 His Phe Gln Gln Ala
 100

<210> 371
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 371
 atgacgggtc acgtcatcct ggcgattcca caggtggtga cgatcatggat cggcctcatc
 60
 tgcacgcgca ttggcacggg ctttatcaag ccgaacctct ccacgggtggg aggaggtctt
 120
 tacgatgacg gtgacccccg ccgcatcag ggtttcctgt acttctacat gtcgatcagt
 180
 attgatctc tcttcgcgcc gatcgtcacc ggctctctca aggaccatta cggctaccac
 240
 gtaggtttca ttgccgtgc tatcggtatg gctctgggtc tgatcgctt cttccacggg
 300
 cgttccaaac tgcgtgagct cgccttcgac atccccaatc cgctggcccc cggcgagggt
 360
 cgccggatgg tgctccgcgg
 380

<210> 372
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 372
 Met Thr Gly His Val Ile Leu Ala Ile Pro Gln Val Val Thr Ser Trp
 1 5 10 15
 Ile Gly Leu Ile Cys Ile Ala Ile Gly Thr Gly Phe Ile Lys Pro Asn
 20 25 30
 Leu Ser Thr Val Val Gly Gly Leu Tyr Asp Asp Gly Asp Pro Arg Arg
 35 40 45
 Asp Gln Gly Phe Leu Tyr Phe Tyr Met Ser Ile Ser Ile Gly Ser Leu

```

      50              55              60
Phe Ala Pro Ile Val Thr Gly Leu Leu Lys Asp His Tyr Gly Tyr His
65              70              75              80
Val Gly Phe Ile Ala Ala Ala Ile Gly Met Ala Leu Gly Leu Ile Ala
      85              90              95
Phe Phe His Gly Arg Ser Lys Leu Arg Glu Leu Ala Phe Asp Ile Pro
      100              105              110
Asn Pro Leu Ala Pro Gly Glu Gly Arg Arg Met Val Leu Arg
      115              120              125

```

<210> 373
 <211> 475
 <212> DNA
 <213> Homo sapiens

```

<400> 373
acatgttgga aaaattgcct cccactctgg tgctacaggt atgaatctca gccacagtga
60
tgactgtggc agctacaggc ctgatgaaca cccaccaag aaaaggagca tcatgtgcct
120
gcttctctct ggttcctaaa tcctttggcc aaacattttc cccacaaccc tccactccag
180
ttggctggtc actgcctctc agaaagaagt cccagggtccc tgtcagcccc agagcgccctg
240
catggactct gccactgtc cctttccaac acggaggccc ccaattctgg ggaccctac
300
accctaccct gtaccaccac atccccatgc ctgctccaga cagcactaac ctcccatgac
360
agtgggacca aagcagttct taaagggtcca atccactcag ttcttaaatg aaaaacagtt
420
gcccatgagt ccccccaaa gacgtccgca catatgccaa acattcggtg tgcac
475

```

<210> 374
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 374
Met Gly Met Trp Trp Tyr Arg Val Gly Cys Arg Gly Pro Gln Asn Trp
1      5      10      15
Gly Pro Pro Cys Trp Lys Gly Thr Val Gly Arg Val His Ala Gly Ala
      20      25      30
Leu Gly Leu Thr Gly Thr Trp Asp Phe Phe Leu Arg Gly Ser Asp Gln
      35      40      45
Pro Thr Gly Val Glu Gly Cys Gly Glu Asn Val Trp Pro Lys Asp Leu
      50      55      60
Gly Thr Arg Glu Lys Gln Ala His Asp Ala Pro Phe Leu Gly Gly Val
65      70      75      80
Phe Ile Arg Pro Val Ala Ala Thr Val Ile Thr Val Ala Glu Ile His
      85      90      95
Thr Cys Ser Thr Arg Val Gly Gly Asn Phe Ser Asn Met
      100      105

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<210> 375
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 375
 nnacgcgtcg cctccacctc gaaacccgcc ggcggtcggt ttttcaccat ggccgaccgc
 60
 aaggcccaag ttgcgacggt cacggacacg ctgtatttca cgccgctcgca atgggatgga
 120
 tgcattggcac ggatgcgtgg ggataagata tcagcactga agtggaatca gatgcagatg
 180
 gcggcatgct ccttcatagc ggcagtgggt gcgaagctgg gctgcccgc ggcactatg
 240
 ggcacggcgc agctgctgta ccagcgtttc catctatttc atgcgccgac tgagttttcg
 300
 ttacatgagg tggctttgac gtgtctcttc ac
 332

<210> 376
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 376
 Xaa Arg Val Ala Ser Thr Ser Lys Pro Ala Gly Gly Arg Phe Phe Thr
 1 5 10 15
 Met Ala Asp Arg Lys Ala Gln Val Ala Thr Val Thr Asp Thr Leu Tyr
 20 25 30
 Phe Thr Pro Ser Gln Trp Asp Gly Cys Met Ala Arg Met Arg Gly Asp
 35 40 45
 Lys Ile Ser Ala Leu Lys Trp Asn Gln Met Gln Met Ala Ala Cys Ser
 50 55 60
 Phe Ile Ala Ala Val Gly Ala Lys Leu Gly Cys Pro Gln Arg Thr Met
 65 70 75 80
 Gly Thr Ala Gln Leu Tyr Gln Arg Phe His Leu Phe His Ala Pro
 85 90 95
 Thr Glu Phe Ser Leu His Glu Val Ala Leu Thr Cys Leu Phe
 100 105 110

<210> 377
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 377
 cgcgtgccag gtatgtcaac tgatctgtcg gatatttccg aggttgagta ccgtcaactg
 60
 aggctggaac gagtgggtgct gtgttcggtg tggactcagg gaactgccgc agacgccgag
 120
 aacgctatgg cggagctgaa agcccttgcg gaaacggcgg gatctcaggt actcgaagct
 180
 gtcattgcaac gtcggactac cccggatccg gcgacgtaca ttggttcggg caaggtggct
 240

gagcttgccg aggtggtgcg ggcgactggt gccgatactg tcatttgtga cggatgaactt
 300
 gacgccgctc agttgcgcaa cctcgaggat cgggtcaagn gcaaagttgt ggaccggctcg
 360
 gtctgattc
 369

<210> 378

<211> 121

<212> PRT

<213> Homo sapiens

<400> 378

Arg	Val	Pro	Gly	Met	Ser	Thr	Asp	Leu	Ser	Asp	Ile	Ser	Glu	Val	Glu
1				5				10					15		
Tyr	Arg	Gln	Leu	Arg	Leu	Glu	Arg	Val	Val	Leu	Cys	Ser	Val	Trp	Thr
		20					25					30			
Gln	Gly	Thr	Ala	Ala	Asp	Ala	Glu	Asn	Ala	Met	Ala	Glu	Leu	Lys	Ala
		35				40					45				
Leu	Ala	Glu	Thr	Ala	Gly	Ser	Gln	Val	Leu	Glu	Ala	Val	Met	Gln	Arg
	50					55				60					
Arg	Thr	Thr	Pro	Asp	Pro	Ala	Thr	Tyr	Ile	Gly	Ser	Gly	Lys	Val	Ala
65				70					75					80	
Glu	Leu	Ala	Glu	Val	Val	Arg	Ala	Thr	Gly	Ala	Asp	Thr	Val	Ile	Cys
			85				90						95		
Asp	Gly	Glu	Leu	Asp	Ala	Ala	Gln	Leu	Arg	Asn	Leu	Glu	Asp	Arg	Val
			100				105						110		
Lys	Xaa	Lys	Val	Val	Asp	Arg	Ser	Val							
		115				120									

<210> 379

<211> 408

<212> DNA

<213> Homo sapiens

<400> 379

acgcgttact taaacttata tgtaaataat aaattcatta tttctagttg gtttaggtact
 60
 atgggctgtg gtttaccagg tgctatggca gctaaaattg cttatccaaa ccgtcaagca
 120
 gtagctatca caggcgacgg tgcgttccaa atggtaatgc aagactttgc tacagctgtt
 180
 caatataact taccaatgac aatctttgta ttaaataaca aacaattgtc attcattaata
 240
 tatgaacaac aagctgctgg tgaattagag tatgccattg atttctctga tatggatcat
 300
 gctaaaatttg ctgaagctgc tgggtggtaaa ggctatgttg tgagagatgt aagtcgtctt
 360
 gacgacatcg ttgaagaggc aatggctcaa gatgttccaa caatcggt
 408

<210> 380

<211> 136

<212> PRT

<213> Homo sapiens

<400> 380

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Thr Arg Tyr Leu Asn Leu Ser Val Asn Asn Lys Phe Ile Ile Ser Ser
 1           5           10           15
Trp Leu Gly Thr Met Gly Cys Gly Leu Pro Gly Ala Met Ala Ala Lys
      20           25           30
Ile Ala Tyr Pro Asn Arg Gln Ala Val Ala Ile Thr Gly Asp Gly Ala
      35           40           45
Phe Gln Met Val Met Gln Asp Phe Ala Thr Ala Val Gln Tyr Asn Leu
      50           55           60
Pro Met Thr Ile Phe Val Leu Asn Asn Lys Gln Leu Ser Phe Ile Lys
65           70           75           80
Tyr Glu Gln Gln Ala Ala Gly Glu Leu Glu Tyr Ala Ile Asp Phe Ser
      85           90           95
Asp Met Asp His Ala Lys Phe Ala Glu Ala Ala Gly Gly Lys Gly Tyr
      100          105          110
Val Val Arg Asp Val Ser Arg Leu Asp Asp Ile Val Glu Glu Ala Met
      115          120          125
Ala Gln Asp Val Pro Thr Ile Val
      130          135

```

<210> 381

<211> 613

<212> DNA

<213> Homo sapiens

<400> 381

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naccgctcat aggcggggccc agtgaagac cacgccaaca cagttgggtg agatccgcgt
60
tgagggcaag gtccctgcgcg tcccgcgaaa tctgggtcaag gcctaccact ctgggctgat
120
cgacgtcgag gactgaaccc tgggagcctg ggcgggtccag catgactgct caggctcatt
180
accaaaacgc gtcgatcccc taggggtgtc gtcattgagca agcccgaagt gaccctgccc
240
gattccgccc ccgacgacct cgtcgttgag gacatcacca tcggcgacgg ccctgaagcg
300
tccgctggca acctcgtcga agtgcaactac gtcggcggtgg ccttaagcaa tggctcgtgag
360
ttcgattctt cctggaaccg cggggagccg ctgaccttcc aactaggggc tggccagggtg
420
atccccgagt gggatgaagg tgtccaaggt atgaaggtcg gtggacgacg caaactcgtc
480
atccccacc accttgctta cggtcgcgaa ggaatctccg gtgtgatcgc tggcggtgag
540
acgtgggtct tcgtctgcga ccttgtaaac atcatctgac gtgacccccg ctcaagcagt
600
cttcgcgccc ggg
613

```

<210> 382

<211> 137

<212> PRT

<213> Homo sapiens

<400> 382

```

Leu Leu Arg Leu Ile Thr Lys Thr Arg Arg Ser Arg Arg Val Val Val
 1           5           10           15
Met Ser Lys Pro Glu Val Thr Leu Pro Asp Ser Ala Pro Asp Asp Leu
      20           25           30
Val Val Glu Asp Ile Thr Ile Gly Asp Gly Pro Glu Ala Ser Ala Gly
      35           40           45
Asn Leu Val Glu Val His Tyr Val Gly Val Ala Leu Ser Asn Gly Arg
      50           55           60
Glu Phe Asp Ser Ser Trp Asn Arg Gly Glu Pro Leu Thr Phe Gln Leu
65           70           75           80
Gly Ala Gly Gln Val Ile Pro Glu Trp Asp Glu Gly Val Gln Gly Met
      85           90           95
Lys Val Gly Gly Arg Arg Lys Leu Val Ile Pro His His Leu Ala Tyr
      100          105          110
Gly Pro Gln Gly Ile Ser Gly Val Ile Ala Gly Gly Glu Thr Leu Val
      115          120          125
Phe Val Cys Asp Leu Val Asn Ile Ile
      130          135

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<210> 383

<211> 352

<212> DNA

<213> Homo sapiens

<400> 383

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nggagcaaca cctgggcctt gggaatgaag tgtaggagtt gcatttgctg aggttggtgt
60
ttgccaaaga gatgccagct tcttcgaact actgctgtgc aactcttcat gttcaaaacc
120
cagttttctg tttttcacac ctgaacatac acccccctgc agttgggtgg ctccccggtt
180
accagctggg ctctatctac agagagagca atggcttccc ttcccttgaa ggaagtctca
240
ccctcacaag gacacttgat ccgctgcaaa gcagaaagtg tgcggaccct ttgggaaggg
300
cgttcttttc ttgttttagaa cctaggatgc tgtttttccc aaacaggatc an
352

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<210> 384

<211> 93

<212> PRT

<213> Homo sapiens

<400> 384

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Met Pro Ala Ser Ser Asn Tyr Cys Cys Ala Thr Leu His Val Gln Asn
 1           5           10           15
Pro Val Phe Cys Phe Ser His Leu Asn Ile His Pro Pro Ala Val Gly
      20           25           30
Trp Leu Pro Arg Tyr Gln Leu Gly Ser Ile Tyr Arg Glu Ser Asn Gly
      35           40           45
Phe Pro Ser Leu Glu Gly Ser Leu Thr Leu Thr Arg Thr Leu Asp Pro

```


50 55 60
 Leu Gln Ser Arg Lys Cys Ala Asp Pro Leu Gly Arg Ala Phe Phe Ser
 65 70 75 80
 Cys Leu Glu Pro Arg Ile Leu Phe Phe Pro Asn Arg Ile
 85 90

<210> 385
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 385
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 gcacctcggg caatgtcctg ggcttgactg gcacacgcaa tcaaagcgag caacaacaca
 120
 caaaaacgca tcatgaggca gacgccaggg aagtgcaga agccgcagca ggcgcgcggc
 180
 gattggaaat atcggtgagg ctaatggtca ccagcgcttg caggttgat tcggtggcca
 240
 attcgcgga cgacagcacc gccagttcca gctcgccgag cagcaccagg cgacgcaagc
 300
 tgcggcgcaa ctccgggtgc accaacaaca ccgactgtt ca
 342

<210> 386
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 386
 Met Gln Asn Ala Pro Phe Thr Gly Arg Gln Val Asp Arg Ala Ala Ser
 1 5 10 15
 Thr Ser Gly Asn Val Leu Gly Leu Thr Gly Thr Arg Asn Gln Ser Glu
 20 25 30
 Gln Gln His Thr Lys Thr His His Glu Ala Asp Ala Arg Glu Val Thr
 35 40 45
 Glu Ala Ala Ala Gly Ala Arg Arg Leu Glu Ile Ser Val Arg Leu Met
 50 55 60
 Val Thr Ser Ala Cys Arg Leu Tyr Ser Val Ala Asn Ser Arg Asn Asp
 65 70 75 80
 Ser Thr Ala Ser Ser Ser Ser Pro Arg Ser Thr Arg Arg Arg Lys Leu
 85 90 95
 Arg Arg Asn Ser Gly Cys Thr Asn Asn Thr Ala Leu Phe
 100 105

<210> 387
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 387
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ggacgtgctg gcacgtctga catggtgcgt ggacccgcct tctcttcgcc tgcgcatgcc
 120
 atgcaagagg agcttgacaa tgtgcgtgat ctgcgccatg cgcggcagca agcgctcgat
 180
 gctgttcggt ccgagctgct cgaagcgcag caagcatgtg cctcgtgcc gctgcagctg
 240
 cagcatgtgc cagatgatcg tgtgcgagcg catcccatat accaggcgct ccatgcggac
 300
 gttgcttaca tgcagcaaga acttgatcac gtacgagacg cattggcttc ggcagaatct
 360
 gagaatgcga gcctgcgcg
 379

<210> 388

<211> 114

<212> PRT

<213> Homo sapiens

<400> 388

Met	Arg	Leu	Val	Arg	Asp	Gln	Val	Leu	Ala	Ala	Cys	Lys	Gln	Arg	Pro
1				5					10					15	
His	Gly	Ala	Pro	Gly	Ile	Trp	Asp	Ala	Leu	Ala	His	Asp	His	Leu	Ala
			20					25					30		
His	Ala	Ala	Ala	Ala	Ala	Gly	Thr	Arg	His	Met	Leu	Ala	Ala	Leu	Arg
			35				40					45			
Ala	Ala	Arg	Asn	Glu	Gln	His	Arg	Ala	Leu	Ala	Ala	Ala	His	Gly	Arg
			50			55					60				
Asp	His	Ala	His	Cys	Gln	Ala	Pro	Leu	Ala	Trp	His	Ala	Gln	Ala	Lys
65					70					75				80	
Arg	Arg	Arg	Val	His	Ala	Pro	Cys	Gln	Thr	Cys	Gln	His	Val	Pro	Gln
				85					90					95	
Pro	Arg	Ala	Arg	Ser	Ser	Leu	Gln	Ser	Thr	Leu	Pro	Met	Pro	Ala	Arg
			100					105						110	
His	Ala														

<210> 389

<211> 382

<212> DNA

<213> Homo sapiens

<400> 389

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 ggctccac gtgctccgca accctccgaa gcgatgacct ggcccggggg cggcaacgag
 120
 gtattgcgtt tggagacgct tgggggtcaat tacggccagg tgcgcgccgt cgatgccttg
 180
 acgaccaccg tagagcgagg caccatcacc tgcctcatgg gtcgaaatgg atcaggcaag
 240
 tcgtctctga tgtgggcat ccaaggggca acaaagtctt cagggagggt actgggtcaac
 300
 cacgagggtt cttgggctga cccccgaaa gccgacgccg cgaccgctcg acgaatggtg
 360

agcttagtcc cgcagtcagc cn
382

<210> 390
<211> 127
<212> PRT
<213> Homo sapiens

<400> 390
Xaa Trp Pro Thr Val Pro Leu Ser Val Arg Glu Ala Arg Arg Arg Val
1 5 10 15
Gly Pro Arg Pro Gly Leu Pro Arg Ala Pro Gln Pro Ser Glu Ala Met
20 25 30
Thr Trp Pro Gly Gly Gly Asn Glu Val Leu Arg Leu Glu Thr Leu Gly
35 40 45
Val Asn Tyr Gly Gln Val Arg Ala Val Asp Ala Leu Thr Thr Thr Val
50 55 60
Glu Arg Gly Thr Ile Thr Cys Leu Met Gly Arg Asn Gly Ser Gly Lys
65 70 75 80
Ser Ser Leu Met Trp Ala Ile Gln Gly Ala Thr Lys Ser Ser Gly Arg
85 90 95
Val Leu Val Asn His Glu Gly Ser Trp Ala Asp Pro Arg Lys Ala Asp
100 105 110
Ala Ala Thr Ala Arg Arg Met Val Ser Leu Val Pro Gln Ser Ala
115 120 125

<210> 391
<211> 456
<212> DNA
<213> Homo sapiens

<400> 391
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60
tgcgacccta tcggtggcat gcacgccttg ttcagcgact ctattcccca gcagatcttc
120
ctgcccgcgc cctccttctt tcgccgccga cgaggccgac gtggagacgt ggtgcagcga
180
ggccgatgaa tcctggacac ccaccgcgac gacctggccg ggatcattgt cgagcccatc
240
ttgcaaggag ccggaggcat gtggccgtgg tctccgtect gtctgaagca cctgcgcgct
300
cgtgctgatg aacttgacct agttcttctc gccgacgagg tcgctactgg atttgggcgg
360
actggcaaac ttttcgcatg cgagtgggcc gatatcgttc ctgacatcat ggtgggttggg
420
aaatccatga ctggcggata cctgacccag tcggcc
456

<210> 392
<211> 55
<212> PRT
<213> Homo sapiens

<400> 392

Gly Ala Tyr His Gly Asp Thr Leu Gly Ala Met Ser Val Cys Asp Pro
 1 5 10 15
 Ile Gly Gly Met His Ala Xaa Phe Ser Asp Ser Ile Pro Gln Ile
 20 25 30
 Phe Leu Pro Ala Pro Ser Phe Phe Arg Arg Arg Arg Gly Arg Arg Gly
 35 40 45
 Asp Val Val Gln Arg Gly Arg
 50 55

<210> 393

<211> 371

<212> DNA

<213> Homo sapiens

<400> 393

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 120
 aacaacctcc ccggttcgga actgtccatc ggcaccgaca ccgctctcaa cgtcatcgtc
 180
 gagcgatgg acaagattaa ggagtcgggt atcgcgtcca gacgctgctt cgtcgtcgag
 240
 acgatgggtc gtgactgcgg atacctcgcg ttgatgtcgg gtatcgagc tggcgtgag
 300
 cggatctata ccaacgagga cggtatctcc ctggacgac tagccaacga cgtccattgg
 360
 ttgcgggagt c
 371

<210> 394

<211> 123

<212> PRT

<213> Homo sapiens

<400> 394

Xaa Ala Leu Leu Val Ile Gly Gly Tyr Ser Ala Tyr Glu Gly Ile Tyr
 1 5 10 15
 Thr Met Met Thr Glu Arg Asp Arg Tyr Pro Ala Phe Arg Ile Pro Thr
 20 25 30
 Val Cys Ile Pro Ala Ser Ile Asp Asn Asn Leu Pro Gly Ser Glu Leu
 35 40 45
 Ser Ile Gly Thr Asp Thr Ala Leu Asn Val Ile Val Glu Ala Met Asp
 50 55 60
 Lys Ile Lys Glu Ser Gly Ile Ala Ser Arg Arg Cys Phe Val Val Glu
 65 70 75 80
 Thr Met Gly Arg Asp Cys Gly Tyr Leu Ala Leu Met Ser Gly Ile Ala
 85 90 95
 Ala Gly Ala Glu Arg Ile Tyr Thr Asn Glu Asp Gly Ile Ser Leu Asp
 100 105 110
 Asp Leu Ala Asn Asp Val His Trp Leu Arg Glu
 115 120

<210> 395
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 395
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 120
 tctcatttct gttttctact ttacgattta tgttatctca tactcccat gttgcctggt
 180
 ctccagtttt ttacttctgt ttatttccat tcttctatct ctgtcaatt tctgcctcag
 240
 ggcagaattg tgtccaacag ctcttaaag cagcgcagaa actgtgatgt taaaaacatc
 300
 ttgttatccg gccccaaac atgttgcctc tggtaactct tactgggttg t
 351

<210> 396
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 396
 Met Val Glu Arg Gln Ser Lys Pro Met Ser Leu Lys Pro Ala Leu Ile
 1 5 10 15
 Ser Val Phe Tyr Phe Thr Ile Tyr Val Ile Ser Tyr Ser Pro Cys Cys
 20 25 30
 Leu Phe Ser Ser Phe Phe Thr Cys Val Ile Ser Ile Leu Leu Phe Leu
 35 40 45
 Leu Asn Phe Cys Leu Arg Ala Glu Leu Cys Pro Thr Ala Leu Lys Cys
 50 55 60
 Ser Ala Glu Thr Val Met Leu Lys Thr Ser Cys Tyr Pro Ala Pro Lys
 65 70 75 80
 His Val Val Leu Gly Asn Ser Tyr Trp Phe
 85 90

<210> 397
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 397
 gccgtcatta aagagatcac ccctctcctc caacctggtg atgtcctcgt cgacgggtgg
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 aatgcttatt ttggtgatac ccgccgccgt gaggaggaaa tacgtccac cggcattcac
 120
 tatgttggtg ctggcatctc cgggtggggga gtcggggccc tgagggtccc atcaattatg
 180
 cctggcgggg ttaaggaatc ttacgaaatc atcggaccgg tcttagaaaa aatctccgcc
 240
 cacgtcgacg gtgaacctg ctgcgcatgg atgggtactg acggcgccgg acacttcgtc
 300

aagatggtcc ataatggcat cgagtacgcc gatatgcagt tcattggcga ggcgccttc
 360
 ctttttgcgn tgcccgcggg tttagaccaat gctgaggccg ccgatgcctt cgagtcgtgg
 420
 aaccatggcg acctcaattc ctacctcgtc gaaatcactt ctgggtact gcgtgccaag
 480
 gat
 483

<210> 398
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 398
 Ala Val Ile Lys Glu Ile Thr Pro Leu Leu Gln Pro Gly Asp Val Leu
 1 5 10 15
 Val Asp Gly Gly Asn Ala Tyr Phe Gly Asp Thr Arg Arg Arg Glu Glu
 20 25 30
 Glu Ile Arg Pro Thr Gly Ile His Tyr Val Gly Thr Gly Ile Ser Gly
 35 40 45
 Gly Gly Val Gly Ala Leu Arg Val Pro Ser Ile Met Pro Gly Gly Val
 50 55 60
 Lys Glu Ser Tyr Glu Ile Ile Gly Pro Val Leu Glu Lys Ile Ser Ala
 65 70 75 80
 His Val Asp Gly Glu Pro Cys Cys Ala Trp Met Gly Thr Asp Gly Ala
 85 90 95
 Gly His Phe Val Lys Met Val His Asn Gly Ile Glu Tyr Ala Asp Met
 100 105 110
 Gln Phe Ile Gly Glu Ala Pro Phe Leu Phe Ala Xaa Pro Ala Gly Leu
 115 120 125
 Thr Asn Ala Glu Ala Ala Asp Ala Phe Glu Ser Trp Asn His Gly Asp
 130 135 140
 Leu Asn Ser Tyr Leu Val Glu Ile Thr Ser Arg Val Leu Arg Ala Lys
 145 150 155 160
 Asp

<210> 399
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 399
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 ggctcatcca cccatccact cattcaccca tctatccatc cactcatcca cccatccagt
 120
 cattcactca ttgtgcatc cactcatgta cccatccact cattcgccca ttatccatc
 180
 cactcaacca tccactcatc caccatcca nctcatcatc cgtccagtca cccatctatc
 240
 caccatgta tccatccact catccaccca tccactcatc tgtccatcca cttatccacc
 300

catctactca ccca
314

<210> 400
<211> 104
<212> PRT
<213> Homo sapiens

<400> 400
Xaa Gly Met Lys Thr Thr Gln Pro Phe Leu Ser Ser Asn Leu Leu Gln
1 5 10 15
Ala Ser Val His Gly Ser Ser Thr His Pro Leu Ile His Pro Ser Ile
20 25 30
His Pro Leu Ile His Pro Ser Ser His Ser Leu Ile Cys Pro Ser Thr
35 40 45
His Val Pro Ile His Ser Phe Ala His Leu Ser Ile His Ser Thr Ile
50 55 60
His Ser Ser Thr His Pro Xaa His His Pro Ser Ser His Pro Ser Ile
65 70 75 80
His Pro Cys Ile His Pro Leu Ile His Pro Ser Thr His Leu Ser Ile
85 90 95
His Leu Ser Thr His Leu Leu Thr
100

<210> 401
<211> 2165
<212> DNA
<213> Homo sapiens

<400> 401
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agaagcaaat atatacagtc aatttaacag tgtttacttc tctggattgt ttaatgggtg
120
caaaatgaaa gatctattga agtttcacta tacattgcat tgattgaacc ttggagagtt
180
ttatgaaaaa gaggggcatc ccttgccatc tgtttgccag tcttccttgc cccttccttt
240
gaaatgcctg cctctttttt gccagattg tttcctgacc atccgaactc agatgggggc
300
ctctaagtgc ttcttgata ttcacaaatc ccttcacaag gccacgtgc gaagtgaatg
360
atctggaggt gcctgggcat ctgtgttgga agggagtcaa gactcaccag ccagtcagtt
420
tgtgggctac agttgtccca caaaaatcag gcatgttcac ctcccctctg ggcccctaca
480
gctgggactg atcatagcct cagattagaa gaaatactga cttctaactc tataagccag
540
cactcctggg taaggagtga agctctgttg gccatgccgc tttggactgc tgggcagagc
600
tgagcctaca gttttgtact ggggtgcacg gatgacagct ggggaagatg aaaggcagct
660
tgaggattta tagcagctaa agggtaaagt ctgttatgca aaagggtccc atatgaactt
720

cctacaggtg tagccgcagc caagtgtctg tacagctgct gagaatttgt cggatgatga
780
aaaatttcctc tttgcatcac aagcgagtgg aaagccaggg gctgcatgag tggagaaaagc
840
acagtctggg ttttcaagta ctgcagagaa tgagaatacc cagccgggag cctggagtgg
900
aggcccaggt tacacaggct cccggaatac agacctggga agatagggga ggagagggga
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1020
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1140
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1200
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1260
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1320
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1380
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1500
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1620
cattatgaag atgggtgctg gtgtgtctgt agaggctatg gagatgaggg gacgagtaga
1680
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1740
ccttgccctc ctgaatttct tgcttcagga cgtaggagtc agcaagggg ttaagggtgat
1800
gcttgagaa gctgcagcgg tgggatctg atcgactcag tttctcatgc ttaaagatgt
1860
cattgatggg ctttctctct tccgagggtc tgcttctgaa actctggacg tgctgaatca
1920
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1980
tggaacacaa gtcaccccta gcaatcagtt tctttttgct gatcaaagg ggtggggagc
2040
cataagggtg gctgctggag aggctggccc cactcacttg ggacaaaagc ttttcttgg
2100
ccagtgggga catcatgcct ggggtgcccc tagagtagag caggggcgtg taattaagtc
2160
catgg
2165

<210> 402

<211> 87

<212> PRT

<213> Homo sapiens

<400> 402

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Glu Tyr Pro Ala Gly Ser Leu Glu Leu Arg Pro Glu Leu His Arg Leu
 1           5           10           15
Pro Glu Tyr Arg Pro Gly Lys Ile Gly Glu Glu Arg Gly Ser Leu Trp
           20           25           30
Pro Phe Asp Pro Pro Pro Glu Cys Pro Pro Cys Ala Ala Leu Leu Pro
           35           40           45
Ser Ser Pro Ala Gln Arg Pro Ser Pro Ser Gln Arg Pro Pro Trp Met
           50           55           60
Gly Leu Arg Glu Thr Leu Pro Gly Pro Phe Ser Leu Gln Ser Gln Gly
65           70           75           80
Pro Asn Pro Pro Gly Cys Ala
           85

```

<210> 403

<211> 369

<212> DNA

<213> Homo sapiens

<400> 403

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cccatggggtg tgtccagga cggcgatcatg aagcgatcagg taaatgacaa ggaaacggtc
60
gcgcacttgt tcgaatacac gacgcaagtg tctgtcgact cgacgccgca actcgatccag
120
ccttcgcccc cgatcgacga caacctcgatg cctgtccaga tgatcttttg cttcaagcag
180
cgcaacgcga aaaagatcaa tagccaccgc tgggtatttc atgcactggg ccgcatgcta
240
cagcccgaca tggatgctctt ggtggacgac ggcacgaagc ccggccacct cgccctatac
300
catctatggc aggcattcta tcaccgacct accttggggc gtgcttgcgg cgaaattcat
360
gctatgatc
369

```

<210> 404

<211> 123

<212> PRT

<213> Homo sapiens

<400> 404

```

Pro Met Gly Val Ser Gln Asp Gly Val Met Lys Arg Gln Val Asn Asp
 1           5           10           15
Lys Glu Thr Val Ala His Leu Phe Glu Tyr Thr Thr Gln Val Ser Val
           20           25           30
Asp Ser Thr Pro Gln Leu Val Gln Pro Ser Pro Thr Ser His Asp Asn
           35           40           45
Leu Val Pro Val Gln Met Ile Phe Cys Phe Lys Gln Arg Asn Ala Lys
           50           55           60
Lys Ile Asn Ser His Arg Trp Val Phe His Ala Leu Gly Arg Met Leu
65           70           75           80
Gln Pro Asp Met Val Val Leu Val Asp Val Gly Thr Lys Pro Gly His

```

```

                85                90                95
Leu Ala Leu Tyr His Leu Trp Gln Ala Phe Tyr His Arg Pro Thr Leu
                100                105                110
Gly Gly Ala Cys Gly Glu Ile His Ala Met Ile
                115                120

```

<210> 405

<211> 840

<212> DNA

<213> Homo sapiens

<400> 405

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gaattcccg gcaccagctc gaagctggag cactttgtgt ctatcctgct gaagtgttc
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gactcgccct ggaccacgag ggccctgtcg gagacagtgg tggaggagag cgaccccaag
120
ccggccttca gcaagatgaa tgggtccatg gacaaaaagt catcgaccgt cagtgaggac
180
gtggaggcca ccgtgcccac gctgcagcgg accaagtcac ggatcgagca gggatatcgtg
240
gaccgctcag agacgggcgt gctggacaag aaggaggggg agcaagccaa ggcgctgttt
300
gagaaggtga agaagttccg gacccatgtg gaggaggggg acattgtgta ccgcctctac
360
atgcggcaga ccatcatcaa ggtgatcaag ttcattcctca tcatctgcta caccgtctac
420
tacgtgcaca acatcaagtt cgacgtggac tgcaccgtgg acattgagag cctgacgggc
480
taccgcacct accgctgtgc ccacccctg gccacactct tcaagatcct ggcgtccttc
540
tacatcagcc tagtcatctt ctacggcctc atctgcatgt atacactgtg gtggatgcta
600
cggcgctccc tcaagaagta ctcgtttgag tcgatccgtg aggagagcag ctacagcgac
660
atccccgacg tcaagaacga cttegccttc atgctgcacc tcattgacca atacgacccg
720
cttactcca agcgcttcgc cgtcttcctg tcggaggtga gtgagaacaa gctgcggcag
780
ctgaacctca acaacgagtg gacgctggac aagctccggt acggagagaa gacaacgcgt
840

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<210> 406

<211> 91

<212> PRT

<213> Homo sapiens

<400> 406

```

Leu Ile Cys Met Tyr Thr Leu Trp Trp Met Leu Arg Arg Ser Leu Lys
 1             5             10             15
Lys Tyr Ser Phe Glu Ser Ile Arg Glu Glu Ser Ser Tyr Ser Asp Ile
      20             25             30
Pro Asp Val Lys Asn Asp Phe Ala Phe Met Leu His Leu Ile Asp Gln
      35             40             45
Tyr Asp Pro Leu Tyr Ser Lys Arg Phe Ala Val Phe Leu Ser Glu Val

```

```

      50              55              60
Ser Glu Asn Lys Leu Arg Gln Leu Asn Leu Asn Asn Glu Trp Thr Leu
65              70              75              80
Asp Lys Leu Arg Tyr Gly Glu Lys Thr Thr Arg
      85              90

```

<210> 407
 <211> 535
 <212> DNA
 <213> Homo sapiens

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<400> 407
gcctattgta ccagctctcc agggctgggg acttgctaga gcagggttcc cagtgtcccc
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aggctctact ttgctctgcc tggcttcagg gtgtagggga tggagagctg gacttcacag
120
ctgcttcttg gctgtctagg ggccaggggc tcgggacaca gagctcctgg aggccgagca
180
caagccttgg gcagaggtga ggcagagctc tgactgtttc attcgactac gttgccaagg
240
agatgctcgc tcggagtggg tgcctctggc ctgggattcc aaaccaagct gccttctctg
300
atgtggcctt agtgcctcgg gcggatgtac cttggctctg cctggaccct ctctctcttc
360
caggcctctg tcccaccagg atgatgccta tccagagctc attgtcctct cccatttctc
420
ccccgagctt cccattccgt gtctctctgg agggcccatc atcatcctgg tggaggtgtt
480
gcactgagga ccacagcagc cctcgcatte ccacgggcaa aggggtatgt gtagg
535

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<210> 408
 <211> 97
 <212> PRT
 <213> Homo sapiens

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<400> 408
Met Leu Ala Arg Ser Gly Cys Ser Gly Ser Gly Ile Pro Asn Gln Ala
1      5      10      15
Ala Phe Ser Asp Val Ala Leu Val Leu Trp Ala Asp Val Pro Trp Leu
20     25     30
Cys Leu Asp Pro Leu Ser Leu Pro Gly Leu Cys Pro Thr Arg Met Met
35     40     45
Pro Ile Gln Ser Ser Leu Ser Ser Pro Thr Ser Ser Pro Ser Phe Pro
50     55     60
Phe Arg Val Ser Leu Glu Gly Pro Ser Ser Ser Trp Trp Arg Cys Cys
65     70     75     80
Thr Glu Asp His Ser Ser Pro Arg Ile Pro Thr Gly Lys Gly Val Cys
85     90     95
Val

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<210> 409
 <211> 375

<212> DNA

<213> Homo sapiens

<400> 409

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ngtgtcatgg gtgtctatac cagcgatgag gccaaagactg ccaagacttt tggatttggt
60
ggacttccga ttacgactaa tattttctctt gccacaact tcaatatgga tgaaatttct
120
gatattgtct tccgtgtcaa tgataccagt ttgacaccaa ctgtgggacc agaattagct
180
agaaaattga ccgaaattgc tggctctcag caaggggagt atcaggtgtc agatgcgact
240
gcagccttcc aagaagtgc acaattgttc ggctttataa ctacgattat tagtgccatt
300
gcaggaatth ccctttttgt tggagggact ggtgttatga acatcatgct ggtttcggtg
360
acggagcgta cgcgt
375

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<210> 410

<211> 125

<212> PRT

<213> Homo sapiens

<400> 410

Xaa	Val	Met	Gly	Val	Tyr	Thr	Ser	Asp	Glu	Ala	Lys	Thr	Ala	Lys	Thr
1				5					10					15	
Phe	Gly	Ile	Gly	Gly	Leu	Pro	Ile	Thr	Thr	Asn	Ile	Ser	Leu	Ala	Asn
			20					25					30		
Asn	Phe	Asn	Met	Asp	Glu	Ile	Ser	Asp	Ile	Val	Phe	Arg	Val	Asn	Asp
		35					40					45			
Thr	Ser	Leu	Thr	Pro	Thr	Val	Gly	Pro	Glu	Leu	Ala	Arg	Lys	Leu	Thr
		50				55					60				
Glu	Ile	Ala	Gly	Leu	Gln	Gln	Gly	Glu	Tyr	Gln	Val	Ser	Asp	Ala	Thr
65					70					75				80	
Ala	Ala	Phe	Gln	Glu	Val	Gln	Gln	Leu	Phe	Gly	Phe	Ile	Thr	Thr	Ile
			85					90						95	
Ile	Ser	Ala	Ile	Ala	Gly	Ile	Ser	Leu	Phe	Val	Gly	Gly	Thr	Gly	Val
		100						105					110		
Met	Asn	Ile	Met	Leu	Val	Ser	Val	Thr	Glu	Arg	Thr	Arg			
		115					120					125			

<210> 411

<211> 409

<212> DNA

<213> Homo sapiens

<400> 411

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ccacatactt caccctcctc acccctcca cctactccac cacctggcag tcgccatcga
60
ggatggggacg caactccacg tccacatgct ccggaccacg cggcgtgtgg tggatgtgca
120
gcacgcggtc ggggcccctt gagctcgaag gcgcggcgca tcgggcagtg ctgcgccggc
180

```

tgggtcgcagg gcacgtcgta ctggtgcgag acgcggaagc acttgtggcc gatgtaggcg
 240
 cgatcggctg tcccgaactg gcgctgatag gccgtgtaca caacacaaac tgttgtactc
 300
 ccggtccacc acgatcatgg gctgggactc gtgttccagg tggggggcca gggcttgggc
 360
 ctgcggtgag cgcgtggggg ggatggggca tagcgtcggg gaggaggtg
 409

<210> 412
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 412
 Met Pro His Pro Pro His Ala Leu Thr Ala Gly Pro Ser Pro Gly Pro
 1 5 10 15
 Pro Pro Gly Thr Arg Val Pro Ala His Asp Arg Gly Gly Pro Gly Val
 20 25 30
 Gln Gln Phe Val Leu Cys Thr Arg Pro Ile Ser Ala Ser Ser Gly Gln
 35 40 45
 Pro Ile Ala Pro Thr Ser Ala Thr Ser Ala Ser Ala Ser Arg Thr Ser
 50 55 60
 Thr Thr Cys Pro Ala Thr Arg Pro Ala Ser Thr Ala Arg Cys Ala Ala
 65 70 75 80
 Pro Ser Ser Ser Arg Gly Pro Asp Arg Val Leu His Ile His His Thr
 85 90 95
 Pro Arg Gly Pro Glu His Val Asp Val Glu Leu Arg Pro Ile Leu Asp
 100 105 110
 Gly Asp Cys Gln Val Val Glu
 115

<210> 413
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 413
 ccgggcatcc caccaccggg tgtcatgaac caagtagtgg cccctatggt agggactcca
 60
 gcaccgggtg gaagtccata tggacaacag gtgggagttt tggggcctcc agggcagcag
 120
 gcaccacctc catatcccg cccacatcca gctggacccc ctgtcatata gcagccaaca
 180
 acacccatgt ttgtagctcc cccccaaag acccagcggc ttcttcactc agaggcctac
 240
 ctgaaataca ttgaaggact cagtgcggag tccaacagca ttagcaagtg ggatcagaca
 300
 ctggcagctc ggagacgca cgtccatttg tcgaaagaac aggagagccg cctaccc
 357

<210> 414
 <211> 119
 <212> PRT

<213> Homo sapiens

<400> 414

```

Pro Gly Ile Pro Pro Pro Gly Val Met Asn Gln Val Val Ala Pro Met
 1             5             10             15
Val Gly Thr Pro Ala Pro Gly Gly Ser Pro Tyr Gly Gln Gln Val Gly
      20             25             30
Val Leu Gly Pro Pro Gly Gln Gln Ala Pro Pro Pro Tyr Pro Gly Pro
      35             40             45
His Pro Ala Gly Pro Pro Val Ile Gln Gln Pro Thr Thr Pro Met Phe
 50             55             60
Val Ala Pro Pro Pro Lys Thr Gln Arg Leu Leu His Ser Glu Ala Tyr
 65             70             75             80
Leu Lys Tyr Ile Glu Gly Leu Ser Ala Glu Ser Asn Ser Ile Ser Lys
      85             90             95
Trp Asp Gln Thr Leu Ala Ala Arg Arg Arg Asp Val His Leu Ser Lys
      100             105             110
Glu Gln Glu Ser Arg Leu Pro
      115

```

<210> 415

<211> 332

<212> DNA

<213> Homo sapiens

<400> 415

```

tctagagcca acttggttat cgtaatgaat agagagacta catctatatc aattattacg
60
ctctatagta atcatgaagc ttgggttata tgtatgacaa aaattgcaga aaaatcgaaa
120
caagaatatg gcgacttact aaaagaaaaa gaccatttac aagatatgga acagcttgag
180
atgactatcg tctcgatcca tacgccgtat ccgtccattg tcagaattca aggaaaaatc
240
aacacattac agccagagct ttggcaagct cccaatttag caattcggtt aattgtgagc
300
aatccgccag agggacaacc catctcacgc gt
332

```

<210> 416

<211> 102

<212> PRT

<213> Homo sapiens

<400> 416

```

Met Asn Arg Glu Thr Thr Ser Ile Ser Ile Ile Thr Leu Tyr Ser Asn
 1             5             10             15
His Glu Ala Trp Val Ile Cys Met Thr Lys Ile Ala Glu Lys Ser Lys
      20             25             30
Gln Glu Tyr Gly Asp Leu Leu Lys Glu Lys Asp His Leu Gln Asp Met
      35             40             45
Glu Gln Leu Glu Met Thr Ile Val Ser Ile His Thr Pro Tyr Pro Ser
      50             55             60
Ile Val Arg Ile Gln Gly Lys Ile Asn Thr Leu Gln Pro Glu Leu Trp

```

```

65          70          75          80
Gln Ala Pro Asn Leu Ala Ile Arg Leu Ile Val Ser Asn Pro Pro Glu
          85          90          95
Gly Gln Pro Ile Ser Arg
          100

```

<210> 417
 <211> 483
 <212> DNA
 <213> Homo sapiens

```

<400> 417
gaattcctcg ccgtctctga ggtgggagag gacacctttg tgcgtccac cgagggagac
60
tacgcggcca acgtcgaggc cgtggtgacc ccagcaccgg cggagaaaga tattgagggc
120
cagccagaag cacaggaaca tgacaccccg ggtacagaga ccattgagaa gctggtcgaa
180
tgggcccagg ggcgaggcat tactgtaaac ccccgcgttg tttgttatta taccctcaag
240
tgcatgatga tcaagctcca ccacccggcc gcggagagcg aagagcgcg gtccgagttg
300
gcggcggttc tcatccctgg cgatcgagag ctggatgaaa agcgccttga ggccgcactc
360
gagccggtgg agtttgagtt ggcaggggat aaggactttg cagacaatga cttcctagtc
420
aagggtatg ttggcccgcg cgctttgaac gccaatgga tcaaggtctt ggccgatcca
480
cgc
483

```

<210> 418
 <211> 161
 <212> PRT
 <213> Homo sapiens

```

<400> 418
Glu Phe Leu Ala Val Ser Glu Val Gly Glu Asp Thr Phe Val Arg Ser
1          5          10          15
Thr Glu Gly Asp Tyr Ala Ala Asn Val Glu Ala Val Val Thr Pro Ala
20          25          30
Pro Ala Glu Lys Asp Ile Glu Gly Gln Pro Glu Ala Gln Glu His Asp
35          40          45
Thr Pro Gly Thr Glu Thr Ile Glu Lys Leu Val Glu Trp Ala Gln Gly
50          55          60
Ala Gly Ile Thr Val Asn Pro Arg Val Val Cys Tyr Tyr Thr Leu Lys
65          70          75          80
Cys Met Met Ile Lys Leu His His Pro Ala Ala Glu Ser Glu Glu Arg
85          90          95
Glu Ser Glu Leu Ala Ala Val Leu Ile Pro Gly Asp Arg Glu Leu Asp
100          105          110
Glu Lys Arg Leu Glu Ala Ala Leu Glu Pro Val Glu Phe Glu Leu Ala
115          120          125
Gly Asp Lys Asp Phe Ala Asp Asn Asp Phe Leu Val Lys Gly Tyr Val

```

130	135	140
Gly Pro Arg Ala Leu Asn Ala Asn Gly Ile Lys Val Leu Ala Asp Pro		
145	150	155
Arg		160

<210> 419
 <211> 797
 <212> DNA
 <213> Homo sapiens

<400> 419
 atttcacccc aggaaaacca gtaaggacca atgattaagc ccaaggttgg gtaccgagtt
 60
 cggatccata agtaccggcc gccccaggggtg ctggaatttg ggctcccccc ggtgaaaata
 120
 tccatgcagc cgcgttgtct taggtagaaa agggagactg ggggtggggtg ggctgagctc
 180
 aagcccttgc ctacatactt tagtagtaac gactcccgat ctgcatccaa cacatttacc
 240
 gaacttctag taagcgcccc ccgctgcaag cgaaagcact cccctgccaa gaaacagatc
 300
 ttttccactt aaaattccca aactcagacc ttccactttt tactgaacaa aaagcgtgta
 360
 catgatctga agggttgaca tgacattttc taaattgggc gaatcaggaa gaggttgatg
 420
 aaaatccttg acgttttctg gggataggac atttgtgtgt gataacgttc ttaagtcgaa
 480
 tttcagtgtg gcagtgcacg cagattcttc attggtgtta gtgtatttcc atacggtatg
 540
 tattagtaca agaaatagtg ttccctttga cactcgaacc caaggagtgg tccgaggctt
 600
 tttagaggca cgtaggatca atgtctctga agcagatttg gtgaaggatg caggtctcat
 660
 aatttacaga gcaatcacag ccttctttga aacggagaaa ttagattcta tgaaattttg
 720
 tcagtgcaga tagatatgat gtggagaaac ggggaaaatt gagtacaaaa agatgaggct
 780
 tgaatgatgg ctggcca
 797

<210> 420
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 420
 Met Arg Pro Ala Ser Phe Thr Lys Ser Ala Ser Glu Thr Leu Ile Leu
 1 5 10 15
 Arg Cys Leu Lys Lys Pro Arg Thr Thr Pro Trp Val Arg Val Ser Lys
 20 25 30
 Gly Thr Leu Phe Leu Val Leu Ile His Thr Val Trp Lys Tyr Thr Asn
 35 40 45
 Thr Asn Glu Glu Ser Ala Cys Thr Ala Thr Leu Lys Phe Asp Leu Arg


```

      50              55              60
Thr Leu Ser His Thr Asn Val Leu Ser Pro Glu Asn Val Lys Asp Phe
65              70              75              80
His Gln Pro Leu Pro Asp Ser Pro Asn Leu Glu Asn Val Met Ser Thr
      85              90              95
Leu Gln Ile Met Tyr Thr Leu Phe Val Gln
      100              105

```

<210> 421
 <211> 406
 <212> DNA
 <213> Homo sapiens

```

<400> 421
ggatccacca tgatggagcc caccaccca tcctcagtc acctgctgca gcttctccat
60
aaccacaacac aggtcaatct tgtctcccta aacacaccat gtgctctcat getgcatgg
120
tttgcttggg gccctctcta cctcctctgc tttctggaga acccttgca cctcccaag
180
ccttcaagtt ggaaagtga cagtcagcat atgtctctag ctcagccctt actgctgga
240
ttcatgaaga ttggttcact gtcagcccct gaccagaacg tgtgttttag gaaagcagga
300
accaagtctt accaatgtct gtagtcccag cctccaccct ggcatacagt aggtgctcat
360
tgaatgtggg agggaaagag gagacacatg gaaggaatg tcattc
406

```

<210> 422
 <211> 104
 <212> PRT
 <213> Homo sapiens

```

<400> 422
Met Met Glu Pro Thr His Pro Ser Ser Val His Leu Leu Gln Leu Leu
1              5              10              15
His Asn Pro Thr Gln Val Asn Leu Val Ser Leu Asn Thr Pro Cys Ala
      20              25              30
Leu Met Leu Pro Trp Phe Ala Trp Gly Pro Leu Tyr Leu Leu Cys Phe
      35              40              45
Leu Glu Asn Pro Cys Thr Pro Pro Lys Pro Ser Ser Trp Lys Val Asn
      50              55              60
Ser Gln His Met Ser Leu Ala Gln Pro Leu Leu Arg Gly Phe Met Lys
65              70              75              80
Ile Gly Ser Leu Ser Ala Pro Asp Gln Asn Val Cys Phe Arg Lys Ala
      85              90              95
Gly Thr Lys Ser Tyr Gln Cys Leu
      100

```

<210> 423
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 423
 ngccacccta cgcctcgcct gcaatggcaa cttcagatcc ccggtggcac cgtagtctta
 60
 gagccaccgg ttctgagcgg ggaggacgac ggggttgggg cggaggaagg agagggagaa
 120
 ggagatgggg atttgctgac gcagacccaa gcccacacgc cgactccagc acccgcttgg
 180
 ccggcgcccc cagccacacc gcgcttcttg gccctcgcaa atggctccct gttggtgccc
 240
 ctcttgagtg ccaaggaggc gggcgtctac acttgccgtg cacacaatga gctgggcgcc
 300
 aactctacgt caatacgcgt ggcggtggca gcaaccgggc ccccaaaaca cgcgcctggc
 360
 gccgggggag aaccgacgg acaggccccg acctctgagc gcaagtccac agccaagggc
 420
 cggggcaaca gcgtcctgcc ttccaaaccc gagggcaaaa tcaaaggcca aggcctggcc
 480
 aaggtcagca ttctcgggga gaccgagacg gagccggagg aggacacaag tgagggagag
 540
 gaggcgaag accagatcct cgcggaccgc gcggaggagc agcgtgtggt caacggggac
 600
 ccctctcggt acgtttctaa ccacgcgt
 628

<210> 424

<211> 209

<212> PRT

<213> Homo sapiens

<400> 424
 Xaa His Pro Thr Pro Arg Leu Gln Trp Gln Leu Gln Ile Pro Gly Gly
 1 5 10 15
 Thr Val Val Leu Glu Pro Pro Val Leu Ser Gly Glu Asp Asp Gly Val
 20 25 30
 Gly Ala Glu Glu Gly Glu Gly Glu Gly Asp Gly Asp Leu Leu Thr Gln
 35 40 45
 Thr Gln Ala Gln Thr Pro Thr Pro Ala Pro Ala Trp Pro Ala Pro Pro
 50 55 60
 Ala Thr Pro Arg Phe Leu Ala Leu Ala Asn Gly Ser Leu Leu Val Pro
 65 70 75 80
 Leu Leu Ser Ala Lys Glu Ala Gly Val Tyr Thr Cys Arg Ala His Asn
 85 90 95
 Glu Leu Gly Ala Asn Ser Thr Ser Ile Arg Val Ala Val Ala Ala Thr
 100 105 110
 Gly Pro Pro Lys His Ala Pro Gly Ala Gly Gly Glu Pro Asp Gly Gln
 115 120 125
 Ala Pro Thr Ser Glu Arg Lys Ser Thr Ala Lys Gly Arg Gly Asn Ser
 130 135 140
 Val Leu Pro Ser Lys Pro Glu Gly Lys Ile Lys Gly Gln Gly Leu Ala
 145 150 155 160
 Lys Val Ser Ile Leu Gly Glu Thr Glu Thr Glu Pro Glu Glu Asp Thr
 165 170 175
 Ser Glu Gly Glu Glu Ala Glu Asp Gln Ile Leu Ala Asp Pro Ala Glu

180 185 190
 Glu Gln Arg Cys Gly Asn Gly Asp Pro Ser Arg Tyr Val Ser Asn His
 195 200 205
 Ala

<210> 425
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 425
 ccggccgctcg aagactttga ggacgatgta gctcgcagcg cagcgttacg agccctggag
 60
 tacgtggatt tgaccccagg cactnaagtg cgcgtcatcg ccattgacac cgtgttccta
 120
 ggatcgtgca cgaatggccg tgaggactta cggctggctg ctgagggttcc caaaggacga
 180
 catatcgtag cgggcacccg gatgctcgtc gccctggat ctgctcgtgt ccgtctgcag
 240
 gctatggagg aaggcctcga cgagatcggg tcccggtttg ctgacatctt tcgcaataac
 300
 tctgcgaaca atggcttggt actggctcag gttgaccccg aggtcgtcga agagttgtgg
 360
 gactttgccg agcagcatcc tggtagagcag ctacccgtct ccctcgagaa tcggacgac
 420
 aaccttcgga gtcgcacgac ctacccgttc catattgatg acgtcacgag t
 471

<210> 426
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 426
 Pro Ala Val Glu Asp Phe Glu Asp Asp Val Ala Arg Ser Ala Ala Leu
 1 5 10 15
 Arg Ala Leu Glu Tyr Val Asp Leu Thr Pro Gly Thr Xaa Val Arg Val
 20 25 30
 Ile Ala Ile Asp Thr Val Phe Leu Gly Ser Cys Thr Asn Gly Arg Glu
 35 40 45
 Asp Leu Arg Leu Ala Ala Glu Val Pro Lys Gly Arg His Ile Ala Ala
 50 55 60
 Gly Thr Arg Met Leu Val Ala Pro Gly Ser Ala Arg Val Arg Leu Gln
 65 70 75 80
 Ala Met Glu Glu Gly Leu Asp Glu Ile Gly Ser Arg Phe Ala Asp Ile
 85 90 95
 Phe Arg Asn Asn Ser Ala Asn Asn Gly Leu Leu Leu Ala Gln Val Asp
 100 105 110
 Pro Glu Val Val Glu Glu Leu Trp Asp Phe Ala Glu Gln His Pro Gly
 115 120 125
 Glu Gln Leu Thr Val Ser Leu Glu Asn Arg Thr Ile Asn Leu Pro Gly
 130 135 140
 Arg Thr Thr Tyr Pro Phe His Ile Asp Asp Val Thr Arg

644

145 150 155 160
 Glu Gln Ile Arg Ala Glu Ile Ala Asn Ser Ser Ser Gly Tyr Asp Lys
 165 170 175
 Glu Lys Leu Gln Glu Arg
 180

<210> 429

<211> 425

<212> DNA

<213> Homo sapiens

<400> 429

gctagcagcc cttacaggag acgggctaata aataatgcag cagtggctcc gacaacttgc
 60
 ccgttgcagc cggtcacgga tccatttgcct tttagtagac aggcgctcca aagtacacca
 120
 ctgggcagtt cgtccaaaag cagtccacct gtcttgcaag gccagagcccc cgcaggggttt
 180
 tctcaacacc ccgggttgcct tgtgccttac acacaatgca aaaaatagct ctcaggggacc
 240
 ctgtgagccc ctgcctggac ctctgacaca gccagagca catgccagtc cgttttctgg
 300
 tgcattgaca ccttcagcac ctctggggcc tgagatgaac aggagtgcag aggtcggtcc
 360
 cagttcagag cctgaagttc agactctgcc atatcttcct cactacattc caggagtgga
 420
 tcctg
 425

<210> 430

<211> 130

<212> PRT

<213> Homo sapiens

<400> 430

Met Gln Gln Trp Leu Arg Gln Leu Ala Arg Cys Ser Arg Ser Arg Ile
 1 5 10 15
 His Leu Leu Leu Val Asp Arg Arg Ser Lys Val His His Trp Ala Val
 20 25 30
 Arg Pro Lys Ala Val His Leu Ser Cys Lys Ala Gln Pro Pro Gln Gly
 35 40 45
 Phe Leu Asn Thr Pro Val Cys Leu Cys Leu Thr His Asn Ala Lys Asn
 50 55 60
 Ser Ser Gln Gly Pro Cys Glu Pro Leu Pro Gly Pro Leu Thr Gln Pro
 65 70 75 80
 Arg Ala His Ala Ser Pro Phe Ser Gly Ala Leu Thr Pro Ser Ala Pro
 85 90 95
 Pro Gly Pro Glu Met Asn Arg Ser Ala Glu Val Gly Pro Ser Ser Glu
 100 105 110
 Pro Glu Val Gln Thr Leu Pro Tyr Leu Pro His Tyr Ile Pro Gly Val
 115 120 125
 Asp Pro
 130

<210> 431
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 431
 ctaccatcc accagcgtac acacacggga gagaggccct aactggcct cgggtgcaac
 60
 cgcgcttcc gccagcgcac ggccctcgtc atccaccagc gcatccacac gggcgagaag
 120
 cctnaccgt gcccggaactg cgagcggcgc ttctctctct cctctcgctt ggtcagtcac
 180
 cggcgtgtgc ac
 192

<210> 432
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 432
 Leu Ala Ile His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Thr Gly
 1 5 10 15
 Leu Gly Cys Asn Arg Arg Phe Arg Gln Arg Thr Ala Leu Val Ile His
 20 25 30
 Gln Arg Ile His Thr Gly Glu Lys Pro Xaa Pro Cys Pro Asp Cys Glu
 35 40 45
 Arg Arg Phe Ser Ser Ser Ser Arg Leu Val Ser His Arg Arg Val His
 50 55 60

<210> 433
 <211> 635
 <212> DNA
 <213> Homo sapiens

<400> 433
 nngccggcgg ctgcgttggg atacgacgtc gctgcgattg ggcgtgagta tctttggtac
 60
 ctcatggagg agcgtggcgc gtatgcggag gccgccgcgc tcatgccgct gctgctccgg
 120
 accgaccgag gcgcgtggga cacgtttgtg tgctgctacc tcgagcggca ccaaagggat
 180
 gcgatactcc cgcacattcc gacgcaggac cccagctga gtgagatggt gtacgatctc
 240
 gtgctggtgc atctgctgca gcacgatccc acgcagctgt tggcgacgct ccgcgcatgg
 300
 ccgagtcaca tctaactcga gcaggcgggtg gctgcggcga tcggcgatca cgcacgaacc
 360
 agccgcacgc tgctcgagt cctcgcacag ctgtacatgg ccgcacatca gcccggaag
 420
 gctctgacat actacatgcg cctgcgtgat ccatgcgtgt ttgatctcat tcgcgagtac
 480
 gatctgctga tcgatgtgca gcaccacatc ggcacgctcg tcgagctcga tcaggaatgc
 540

gccggctcca ctgagccgcg ctccagcgcg cttatgccgc tgctcgtgcc atatacccaac
 600
 tcgattccca tccagcgcgc catggcgcag ctoga
 635

<210> 434
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 434
 Xaa Pro Ala Ala Ala Leu Gly Tyr Asp Val Ala Ala Ile Gly Arg Glu
 1 5 10 15
 Tyr Leu Trp Tyr Leu Met Glu Glu Arg Gly Ala Tyr Ala Glu Ala Ala
 20 25 30
 Ala Leu Met Pro Leu Leu Leu Arg Thr Asp Arg Gly Ala Trp Asp Thr
 35 40 45
 Phe Val Cys Cys Tyr Leu Glu Arg His Gln Arg Asp Ala Ile Leu Pro
 50 55 60
 His Ile Pro Thr Gln Asp Pro Gln Leu Ser Glu Met Val Tyr Asp Leu
 65 70 75 80
 Val Leu Val His Leu Leu Gln His Asp Pro Thr Gln Leu Leu Ala Thr
 85 90 95
 Leu Arg Ala Trp Pro Ser His Ile Tyr Ser Lys Gln Ala Val Ala Ala
 100 105 110
 Ala Ile Gly Asp His Ala Arg Thr Ser Arg Thr Leu Leu Glu Cys Leu
 115 120 125
 Ala Gln Leu Tyr Met Ala Ala His Gln Pro Gly Lys Ala Leu Thr Tyr
 130 135 140
 Tyr Met Arg Leu Arg Asp Pro Cys Val Phe Asp Leu Ile Arg Glu Tyr
 145 150 155 160
 Asp Leu Leu Ile Asp Val Gln His His Ile Gly Thr Leu Val Glu Leu
 165 170 175
 Asp Gln Glu Cys Ala Gly Ser Thr Glu Pro Arg Ser Ser Ala Leu Met
 180 185 190
 Pro Leu Leu Val Pro Tyr Thr His Ser Ile Pro Ile Gln Arg Ala Met
 195 200 205
 Ala Gln Leu
 210

<210> 435
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 435
 nncgtacgtt cgcgtatattt ccgcgcccgg gaagctatcg ataataaagt tcaaccgctg
 60
 atccagcgtt agcaatggcg ggcacaggaa gggacttag gcatgcagaa agaaaagctt
 120
 tccgctctga tggatggtga atcggttcgac agcgagctgt tgagttctct gtcgcaagat
 180
 cgaacgcttc aacaaagctg gcagggttat cacctgatac gtgacacact gcgaggtgat
 240

gtcgggcaag tgatgcatct cgacatcgcc gatcgcgtag ccgctgcact tgagaaagaa
 300
 cccgcccggc tgggtgccttc cgccgttcag gaatctcagc cgcagcctca cacctggcag
 360
 aaaatgccgt tctgggacaa agtgcgtccc tgggcgagcc agattacgca aatcgggtatg
 420
 gcggcctgcg tgctgctggc ggtgatcgtc ggcgtgcagc agtacaacca gccttctgcg
 480
 ccatcgaacg cgt
 493

<210> 436
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 436
 Met Gln Lys Glu Lys Leu Ser Ala Leu Met Asp Gly Glu Ser Phe Asp
 1 5 10 15
 Ser Glu Leu Leu Ser Ser Leu Ser Gln Asp Arg Thr Leu Gln Gln Ser
 20 25 30
 Trp Gln Gly Tyr His Leu Ile Arg Asp Thr Leu Arg Gly Asp Val Gly
 35 40 45
 Gln Val Met His Leu Asp Ile Ala Asp Arg Val Ala Ala Ala Leu Glu
 50 55 60
 Lys Glu Pro Ala Arg Leu Val Pro Ser Ala Val Gln Glu Ser Gln Pro
 65 70 75 80
 Gln Pro His Thr Trp Gln Lys Met Pro Phe Trp Asp Lys Val Arg Pro
 85 90 95
 Trp Ala Ser Gln Ile Thr Gln Ile Gly Met Ala Ala Cys Val Ser Leu
 100 105 110
 Ala Val Ile Val Gly Val Gln Gln Tyr Asn Gln Pro Ser Ala Pro Ser
 115 120 125
 Asn Ala
 130

<210> 437
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 437
 ntggtaaccg gtgtccctga tatggaccct gctgtgtag agcgtaaatt atttatttta
 60
 cgtaattatg taacacgcat ctgtttggag tctgttaatg gaattaagga caacttttac
 120
 attaatacat tctcatataa aacaatcggt tataaagggtc agttaaccac tgaacaagtg
 180
 ccacaatatt tcttagattt acaaaatcca agtatggtaa cggcattagc gcttgttcat
 240
 tcacgtttct caacaaatac atttcctcgt tggcgtttag cacaaccatt ccgttacatc
 300
 gtcataatg gcgaaatcaa tacgggttcgc ggtaatatca attggatgaa agcacgtgaa
 360

gcgttacttg aagctgaatt ttctactcgc tcagaattag atatgttaat gccaatctgt
 420
 acggatggta tgtctgactc ggcaagg
 447

<210> 438
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 438
 Xaa Val Thr Gly Val Pro Asp Met Asp Pro Ala Val Leu Glu Arg Lys
 1 5 10 15
 Leu Phe Ile Leu Arg Asn Tyr Val Thr Arg Ile Cys Leu Glu Ser Val
 20 25 30
 Asn Gly Ile Lys Asp Asn Phe Tyr Ile Asn Thr Phe Ser Tyr Lys Thr
 35 40 45
 Ile Val Tyr Lys Gly Gln Leu Thr Thr Glu Gln Val Pro Gln Tyr Phe
 50 55 60
 Leu Asp Leu Gln Asn Pro Ser Met Val Thr Ala Leu Ala Leu Val His
 65 70 75 80
 Ser Arg Phe Ser Thr Asn Thr Phe Pro Arg Trp Arg Leu Ala Gln Pro
 85 90 95
 Phe Arg Tyr Ile Ala His Asn Gly Glu Ile Asn Thr Val Arg Gly Asn
 100 105 110
 Ile Asn Trp Met Lys Ala Arg Glu Ala Leu Leu Glu Ala Glu Phe Phe
 115 120 125
 Thr Arg Ser Glu Leu Asp Met Leu Met Pro Ile Cys Thr Asp Gly Met
 130 135 140
 Ser Asp Ser Ala Arg
 145

<210> 439
 <211> 395
 <212> DNA
 <213> Homo sapiens

<400> 439
 nacgcgtgaa gggagagtgg ggccgagccc caggaggctg tctgcagca gctgcaccag
 60
 cttcccaggg gccggctgga cctggccacg caaagcctga cggaggagac ctgcagggcc
 120
 ctgggcaagc tgctgccgag ggagacgctg tgcacggagc tggtcctgag tgactgcatg
 180
 ctcagcgagg aagggggccac actgctgctc cgaggcctgt gtgccaacac cgtgctgcgc
 240
 tttctggact taaagggcaa caaccttcgg gctgcagggg ccgaggctct gggaaaactc
 300
 ctccaacaga acaagtccat tcagagcctc acgctggagt ggaacagcct gggcacgtgg
 360
 gacgatgcct tcgccacctt ctgcgggggc ctggc
 395

<210> 440

<211> 128
 <212> PRT
 <213> Homo sapiens

<400> 440
 Arg Glu Ser Gly Ala Glu Pro Gln Glu Ala Val Leu Gln Gln Leu His
 1 5 10 15
 Gln Leu Pro Arg Gly Arg Leu Asp Leu Ala Thr Gln Ser Leu Thr Val
 20 25 30
 Glu Thr Cys Arg Ala Leu Gly Lys Leu Leu Pro Arg Glu Thr Leu Cys
 35 40 45
 Thr Glu Leu Val Leu Ser Asp Cys Met Leu Ser Glu Glu Gly Ala Thr
 50 55 60
 Leu Leu Leu Arg Gly Leu Cys Ala Asn Thr Val Leu Arg Phe Leu Asp
 65 70 75 80
 Leu Lys Gly Asn Asn Leu Arg Ala Ala Gly Ala Glu Ala Leu Gly Lys
 85 90 95
 Leu Leu Gln Gln Asn Lys Ser Ile Gln Ser Leu Thr Leu Glu Trp Asn
 100 105 110
 Ser Leu Gly Thr Trp Asp Asp Ala Phe Ala Thr Phe Cys Gly Gly Leu
 115 120 125

<210> 441
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 441
 gccagctact acgtgaacat gtctgatgcc gagcagggct tcttcgacag gcgcagcccg
 60
 ggcgggcgagt tccaagccgg cttggatccg gaatcctggg gcggtctgtt cactgagacc
 120
 gacgggttga acttcgcctt ccacgctcca caggacggcc gggggctggc cgcgctctac
 180
 ggcggtccga aaggcttga gaacaagctc gatgcctttt tcgcgacgcc ggaaaacgcg
 240
 gacaagccgg cgtacggcgg aatccacgaa atggctcgagg ccagagcggc cgggatgggc
 300
 caattgggca tgtccaacga gccctcgac catattccct acatctacaa ctatgccggc
 360
 gcgc
 364

<210> 442
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 442
 Ala Gln Tyr Tyr Val Asn Met Phe Asp Ala Glu Gln Gly Phe Phe Asp
 1 5 10 15
 Arg Arg Ser Pro Gly Gly Glu Phe Gln Ala Gly Leu Asp Pro Glu Ser
 20 25 30
 Trp Gly Gly Leu Phe Thr Glu Thr Asp Gly Trp Asn Phe Ala Phe His

```

      35              40              45
Ala Pro Gln Asp Gly Arg Gly Leu Ala Ala Leu Tyr Gly Gly Pro Lys
      50              55              60
Gly Leu Glu Asn Lys Leu Asp Ala Phe Phe Ala Thr Pro Glu Asn Ala
65              70              75              80
Asp Lys Pro Ala Tyr Gly Gly Ile His Glu Met Val Glu Ala Arg Ala
      85              90              95
Val Arg Met Gly Gln Leu Gly Met Ser Asn Glu Pro Ser His His Ile
      100              105              110
Pro Tyr Ile Tyr Asn Tyr Ala Gly Ala
      115              120

```

<210> 443
 <211> 430
 <212> DNA
 <213> Homo sapiens

```

<400> 443
accggttacg gtcagtgca acaagagatg ttcgccaaca acctcgtgcg gatgccgctg
60
ctcatggtgc tggcaatccc ctctcgcaag atcctctcga cgaccctgtc catcggatcg
120
ggcgggtccgg cggcgtcttc cggccctggc atgggtcatcg gcggagccac tggcgcgggca
180
ctgtggcgcc tctctgaggg gctgccaggt atcccatcct caccgatgag tttcgtcatt
240
gtcggcatga tcgcctgctt cgggtgcggtt gcccatgccc cactcggcgt gctgctcatg
300
gttggcgaga tgaccggaaa cctgtcgctg ctgcgtcctg gcatgatcgc cgtcgccgtc
360
gctggccgag ttgtcgggga cacttcgacg tacacctctc agctcaagga tcgcctggag
420
ggcgacgcgt
430

```

<210> 444
 <211> 143
 <212> PRT
 <213> Homo sapiens

```

<400> 444
Thr Gly Tyr Gly Ser Val Gln Gln Glu Met Phe Ala Asn Asn Leu Val
1      5      10      15
Arg Met Pro Leu Leu Met Val Leu Ala Ile Pro Phe Ala Lys Ile Leu
      20      25      30
Ser Thr Thr Leu Ser Ile Gly Ser Gly Gly Pro Ala Ala Ser Ser Gly
      35      40      45
Pro Gly Met Val Ile Gly Gly Ala Thr Gly Ala Ala Leu Trp Arg Leu
      50      55      60
Leu Glu Gly Leu Pro Gly Ile Pro Ser Ser Pro Met Ser Phe Val Ile
65      70      75      80
Val Gly Met Ile Ala Cys Phe Gly Ala Val Ala His Ala Pro Leu Gly
      85      90      95
Val Leu Leu Met Val Gly Glu Met Thr Gly Asn Leu Ser Leu Leu Ala

```

```

                100                105                110
Pro Gly Met Ile Ala Val Ala Val Ala Gly Arg Val Val Gly Asp Thr
      115                120                125
Ser Ile Tyr Thr Ser Gln Leu Lys Asp Arg Leu Glu Gly Asp Ala
      130                135                140

```

<210> 445
 <211> 360
 <212> DNA
 <213> Homo sapiens

```

<400> 445
ccatggggct gcctagcctc tggggaggcc cctcagctgg tgacaccagc agggcagatt
60
tcttgcttta ttgtcaccc tgtccagggt tccctctggt tgtgaggag ctgctgccac
120
cttgggtcca ggaagcatga agctccgcag gtcagcctcc tgggtgggagg acttttcctt
180
agttttcttt gctcttctgc tctgagtcca gccctggctg gacctttgat cccttctctc
240
tttatcagga aattttctga ctttcttctt ttgccttttc aagatctgtg atgccatctc
300
caagtgggaa caagccatga aggagctgca ccccgaaag tctgagggtg ggacacgcgt
360

```

<210> 446
 <211> 101
 <212> PRT
 <213> Homo sapiens

```

<400> 446
Met Ala Cys Ser His Leu Glu Met Ala Ser Gln Ile Leu Lys Arg Gln
 1      5      10      15
Lys Lys Lys Val Arg Lys Phe Pro Asp Lys Glu Arg Arg Asp Gln Arg
      20      25      30
Ser Ser Gln Gly Trp Thr Gln Ser Arg Arg Ala Lys Lys Thr Lys Glu
      35      40      45
Lys Ser Ser His Gln Glu Ala Asp Leu Arg Ser Phe Met Leu Pro Gly
      50      55      60
Pro Lys Val Ala Ala Ala Pro Ser Gln Thr Glu Gly Thr Leu Asp Arg
65      70      75      80
Val Ser Asn Lys Ala Arg Asn Leu Pro Cys Trp Cys His Gln Leu Arg
      85      90      95
Gly Leu Pro Arg Gly
      100

```

<210> 447
 <211> 487
 <212> DNA
 <213> Homo sapiens

```

<400> 447
acgcgtgaag ggggaaattg ctcgtgccac ctgaggatta atcattaccc tggaaccctt
60

```

cccaaggcca tcaaggaaca cgcacccctt accagacctt ccagctgctg ggggctctcc
 120
 gagtgaggct gaggtcatgg agaagggaat ggggggcccc catggccagc tggacctgat
 180
 cactgcctcc ccactcagcc acagccctca gggccctgtg ccagtccaga agcccattca
 240
 gggacacctt tggccaatgt tctgtttcat ctgcgaggca accttccccca gtgccccaac
 300
 catagcgttt tccccaaac accctcagga aggagggacc actacctgtg cagggggggc
 360
 caggagcctc ctgagagcct catatgggga ggaagtggta ccattctacc cccattgcct
 420
 ttctctccta cttccacctg gccagcttcc ctcaagtccc ctctgcctc agtgccccctt
 480
 cacgcgt
 487

<210> 448

<211> 117

<212> PRT

<213> Homo sapiens

<400> 448

Met	Glu	Lys	Gly	Met	Gly	Gly	Pro	His	Gly	Gln	Leu	Asp	Leu	Ile	Thr
1				5					10					15	
Ala	Ser	Pro	Leu	Ser	His	Ser	Pro	Gln	Gly	Pro	Val	Pro	Val	Gln	Lys
			20					25					30		
Pro	Ile	Gln	Gly	His	Leu	Trp	Pro	Met	Phe	Cys	Phe	Ile	Cys	Glu	Ala
		35					40					45			
Thr	Phe	Pro	Ser	Ala	Pro	Thr	Ile	Ala	Phe	Ser	Pro	Lys	His	Pro	Gln
	50					55					60				
Glu	Gly	Gly	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Arg	Ser	Leu	Leu	Arg
65					70					75				80	
Ala	Ser	Tyr	Gly	Glu	Glu	Val	Val	Pro	Ser	His	Pro	His	Cys	Leu	Ser
			85					90					95		
Leu	Leu	Leu	Pro	Pro	Gly	Gln	Leu	Pro	Ser	Val	Pro	Leu	Leu	Pro	Gln
			100					105					110		
Cys	Pro	Phe	Thr	Arg											
			115												

<210> 449

<211> 353

<212> DNA

<213> Homo sapiens

<400> 449

gagctcagcc agttggagtt tgagaagcgg cagctgcaca gggacttggg gcaggccaag
 60
 gagaaggggg agcgggcaga gaagctggag agggagctac agcgactcca ggaggagaac
 120
 gggaggctgg ccaggaaggt gacctccctg gagacagcca ccgagaaagt cgaggccctg
 180
 gagcatgaga gccagggcct gcagctggag aaccggactc tgaggaagtc tctggacacc
 240

ttgcagaacg tgtccctgca gcttgagggc ctggagcgtg acaacaagca gctggacgca
 300
 gagaacctgg agctgcgcag gctggtggag accatgcgga gacgacaacg cgt
 353

<210> 450

<211> 117

<212> PRT

<213> Homo sapiens

<400> 450

Glu	Leu	Ser	Gln	Leu	Glu	Phe	Glu	Lys	Arg	Gln	Leu	His	Arg	Asp	Leu
1				5					10					15	
Glu	Gln	Ala	Lys	Glu	Lys	Gly	Glu	Arg	Ala	Glu	Lys	Leu	Glu	Arg	Glu
			20					25					30		
Leu	Gln	Arg	Leu	Gln	Glu	Glu	Asn	Gly	Arg	Leu	Ala	Arg	Lys	Val	Thr
			35				40					45			
Ser	Leu	Glu	Thr	Ala	Thr	Glu	Lys	Val	Glu	Ala	Leu	Glu	His	Glu	Ser
	50					55					60				
Gln	Gly	Leu	Gln	Leu	Glu	Asn	Arg	Thr	Leu	Arg	Lys	Ser	Leu	Asp	Thr
65				70					75					80	
Leu	Gln	Asn	Val	Ser	Leu	Gln	Leu	Glu	Gly	Leu	Glu	Arg	Asp	Asn	Lys
			85					90					95		
Gln	Leu	Asp	Ala	Glu	Asn	Leu	Glu	Leu	Arg	Arg	Leu	Val	Glu	Thr	Met
			100					105					110		
Arg	Arg	Arg	Gln	Arg											
			115												

<210> 451

<211> 444

<212> DNA

<213> Homo sapiens

<400> 451

gtgatgcggc tgactaagcc tactttattc accaatatcc cagtaacatg tgaagagaaa
 60
 gacttacctg gagatctctt taaccagctg atgagagatg atccttcaac cgtaaatggt
 120
 gcagaagttt taatgttggg agaaatgctg actttaccac agaattttgg gaatatatct
 180
 ttgggagaga ctttttccag ttatatcagc gttcataatg atagcaatca agttgtaaaa
 240
 gacatattag taaaagctga tcttcagaca agttctcagc gtttaaactt ttcagcctcc
 300
 aatgctgcag tggtgaact taaaccggat tggtgtattg atgatgtcat acatcatgaa
 360
 gtcaaagaaa ttggaacaca catcttggtg tgtgctgtga gttatacaac tcaggctgga
 420
 gaaaaaatgt atttcagaaa attt
 444

<210> 452

<211> 148

<212> PRT

<213> Homo sapiens

<400> 452

```

Val Met Arg Leu Thr Lys Pro Thr Leu Phe Thr Asn Ile Pro Val Thr
 1           5           10           15
Cys Glu Glu Lys Asp Leu Pro Gly Asp Leu Phe Asn Gln Leu Met Arg
      20           25           30
Asp Asp Pro Ser Thr Val Asn Gly Ala Glu Val Leu Met Leu Gly Glu
      35           40           45
Met Leu Thr Leu Pro Gln Asn Phe Gly Asn Ile Phe Leu Gly Glu Thr
      50           55           60
Phe Ser Ser Tyr Ile Ser Val His Asn Asp Ser Asn Gln Val Val Lys
65           70           75           80
Asp Ile Leu Val Lys Ala Asp Leu Gln Thr Ser Ser Gln Arg Leu Asn
      85           90           95
Leu Ser Ala Ser Asn Ala Ala Val Ala Glu Leu Lys Pro Asp Cys Cys
      100          105          110
Ile Asp Asp Val Ile His His Glu Val Lys Glu Ile Gly Thr His Ile
      115          120          125
Leu Val Cys Ala Val Ser Tyr Thr Thr Gln Ala Gly Glu Lys Met Tyr
      130          135          140
Phe Arg Lys Phe
145

```

<210> 453

<211> 373

<212> DNA

<213> Homo sapiens

<400> 453

```

gctagctctg accccacctt tgccaagtgg cactaggggtg gccaatgggg actaggggtg
60
tataattgga aaatacagtc tcccctgttg tccaagaaag gcccagatg acctggggct
120
tgaaaggcac tcccgctggg tgcttctctg gagcaggtgg ggggcagcgg ggcggcgggg
180
cctgtctctg ctgagcatcc ccagctccag ggcaggtgct gggctctgag cccactggg
240
gcgttttggg atgggctggc ctgcgcggct gtcgtttcag agcacacaga agagaccctg
300
ccacaggagg agtgggagga gaagctgttg atgttcctgc gagacaccct ggccatcatt
360
tctgacaacg cgt
373

```

<210> 454

<211> 108

<212> PRT

<213> Homo sapiens

<400> 454

```

Met Met Ala Arg Val Ser Arg Arg Asn Ile Asn Ser Phe Ser Ser His
 1           5           10           15
Ser Ser Cys Gly Arg Val Ser Ser Val Cys Ser Glu Thr Thr Ala Ala

```

```

                20                25                30
Gln Ala Ser Pro Ser Gln Asn Ala Pro Val Gly Leu Arg Ala Gln His
                35                40                45
Leu Pro Trp Ser Trp Gly Cys Ser Ala Gln Thr Gly Pro Ala Ala Pro
                50                55                60
Leu Pro Pro Thr Cys Ser Gln Glu Ala Pro Ser Gly Ser Ala Phe Gln
65                70                75                80
Ala Pro Gly His Leu Gly Pro Phe Leu Asp Asn Arg Gly Asp Cys Ile
                85                90                95
Phe Gln Leu Tyr Asn Pro Ser Pro His Trp Pro Pro
                100                105

```

<210> 455

<211> 602

<212> DNA

<213> Homo sapiens

<400> 455

```

cctaggcaaa gcatgccac cctacctccc cttaccctta cccttcattt tcccctaagc
60
acccatcacc accgatgtta ctgtatgtgt ttgcttacgc tgacagccca ccaccacac
120
tggaatgtcc gcacgacaaa ggcaggactc ttggctgcct tagccacagc tggatcccca
180
gagctttgta ggggtgttggg cacagagtgg agtgggtact taataagtat ctgtggaatg
240
aacatgtaca gagtgaagcc ctgtgcccag aacaggctca aaataagctc aattcctttc
300
cttgccactt actaagtcct ttttctctcg cccctctca ctgacctggt tttgatgcca
360
gacagcacag atgggctagg gaggcagggtg gggaagcaga gatctgcgtc tcttgagct
420
ggagctggtg ggtggggctc ctctctggtg ctgcggaggc tcattgggga ggtggcagcg
480
acccctcag gagcctctgt cgctgcact cagatctgtg cctttccaca gcgcccggag
540
gaagacttgc tcaggagata aattcaaaga caacaggaag ctggacgtgg tggctcacgc
600
gt
602

```

<210> 456

<211> 100

<212> PRT

<213> Homo sapiens

<400> 456

```

Met Pro Thr Leu Pro Pro Leu Thr Leu Thr Leu His Phe Pro Leu Ser
1                5                10                15
Thr His His His Arg Cys Tyr Cys Met Cys Leu Leu Thr Leu Thr Ala
                20                25                30
His His Pro His Trp Asn Val Arg Thr Thr Lys Ala Gly Leu Leu Ala
                35                40                45
Ala Leu Ala Thr Ala Gly Ser Pro Glu Leu Cys Arg Val Leu Gly Thr

```



```

      50              55              60
Glu Trp Ser Gly Tyr Leu Ile Ser Ile Cys Gly Met Asn Met Tyr Arg
65              70              75              80
Val Lys Pro Cys Ala Gln Asn Arg Leu Lys Ile Ser Ser Ile Pro Phe
      85              90              95
Leu Ala Thr Tyr
      100

```

<210> 457
 <211> 324
 <212> DNA
 <213> Homo sapiens

```

<400> 457
acgcgtcatg tggatattcc tgggaggttc ccaggaacgt ttctggacgg gcccccgacc
60
agaggtcagg gaacttttct tattattctg cacgtgccca gggatagtca aaccaggtct
120
tccccttctg ctggcgcgaa cacgccagcc gccgccacga ccgcacgctg aattcatgac
180
ccgacacgcg acgtggcagc gagcacaccc accgctagga gaaagagcgc tcatcgaaga
240
tcgttttctg tccactggcc agcgccacta tgatcagggtg gggatatccgc ccggcgggcgg
300
gagcaccggg acgccggggc gccg
324

```

<210> 458
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 458
Met Trp Ile Phe Leu Gly Gly Ser Gln Glu Arg Phe Trp Thr Gly Pro
1      5      10      15
Arg Pro Glu Val Arg Glu Leu Phe Leu Leu Phe Cys Thr Cys Pro Gly
      20      25      30
Ile Val Lys Pro Gly Leu Pro Leu Leu Ala Ala Thr Arg Gln Pro
      35      40      45
Pro Pro Arg Pro His Ala Glu Phe Met Thr Arg His Ala Thr Trp Gln
      50      55      60
Arg Ala His Pro Pro Leu Gly Glu Arg Ala Leu Ile Glu Asp Arg Phe
65      70      75      80
Leu Ser Thr Gly Gln Arg His Tyr Asp Gln Val Gly Tyr Pro Pro Gly
      85      90      95
Gly Gly Ser Thr Gly Thr Pro Gly Arg
      100      105

```

<210> 459
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 459

acgcgttcat tcggcatctg cttccatgga tttcctgcgg ggaggcgcg ccgagagtgc
 60
 ggggtgtcgaa cacgacactt cagtgatcgt ttcaaccacc ggccgagatg ggtcctgacg
 120
 ctgggcttca agccgcttgc gctcgcgctc ctgatctcgg gcagcgcgat tccgggtggtt
 180
 tatgctgccg gcagacgact gcgcacgccc ctcacgaggt atctgcacat gcttaaaggg
 240
 agaggcctca cccgacagct gggcatcgga tttacgaagc ccacgacgaa tcttcctcgc
 300
 ctctctcaaag ccgatcatcg gcattgccagg tttgtggttg aatgcttcga tcaacacact
 360
 aggatcggtg gggccacca catacaccga gcggcaatcg agcggatagc acctc
 415

<210> 460

<211> 105

<212> PRT

<213> Homo sapiens

<400> 460

Met	Pro	Met	Ile	Gly	Phe	Glu	Glu	Ala	Arg	Lys	Ile	Arg	Arg	Gly	Leu
1				5					10					15	
Arg	Lys	Ser	Asp	Ala	Gln	Leu	Ser	Gly	Glu	Ala	Ser	Pro	Phe	Lys	His
			20					25					30		
Val	Gln	Ile	Pro	Arg	Glu	Gly	Arg	Ala	Gln	Ser	Ser	Ala	Gly	Ser	Ile
			35				40						45		
Asn	His	Arg	Asn	Arg	Ala	Ala	Arg	Asp	Gln	Glu	Arg	Glu	Arg	Lys	Arg
			50				55					60			
Leu	Glu	Ala	Gln	Arg	Gln	Asp	Pro	Ser	Arg	Pro	Val	Val	Glu	Thr	Ile
65					70				75					80	
Thr	Glu	Val	Ser	Cys	Ser	Thr	Pro	Ala	Leu	Ser	Ala	Ala	Pro	Pro	Arg
			85						90					95	
Arg	Lys	Ser	Met	Glu	Ala	Asp	Ala	Glu							
			100					105							

<210> 461

<211> 357

<212> DNA

<213> Homo sapiens

<400> 461

acgcgttcga ggtcggctaa atttatcatg cgcacgacaa agagagtagt ggctcacaac
 60
 cgggtcacat gcatgatgac aaaaactggc agaataagagt tgatgtcatc ccgtctacca
 120
 gctcctagaa ccagctcaga gagtcccggg gtcgggtaccg tcgagactca gtacacaact
 180
 gtcgcgatac cggacgaccc tcttcattctg gttgcagatg ggcgtctcaa tcacgtcact
 240
 gtcgcttacg aaacctacgg gaagctcaat acgtccagcg acaatgcggg ctatacctgt
 300
 catgcgctta ctggtgatgc ccatgcagcc ggatttcacc ccggtgtagt ccgtccg
 357

<210> 462
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 462
 Thr Arg Ser Arg Ser Ala Lys Phe Ile Met Arg Thr Thr Lys Arg Val
 1 5 10 15
 Val Ala His Asn Arg Val Thr Cys Met Met Thr Lys Thr Gly Arg Ile
 20 25 30
 Glu Leu Met Ser Ser Arg Leu Pro Ala Pro Arg Thr Ser Ser Glu Ser
 35 40 45
 Pro Gly Val Gly Thr Val Glu Thr Gln Tyr Thr Thr Val Ala Ile Pro
 50 55 60
 Asp Asp Pro Leu His Leu Val Ala Asp Gly Arg Leu Asn His Val Thr
 65 70 75 80
 Val Ala Tyr Glu Thr Tyr Gly Lys Leu Asn Thr Ser Ser Asp Asn Ala
 85 90 95
 Val Tyr Thr Cys His Ala Leu Thr Gly Asp Ala His Ala Ala Gly Phe
 100 105 110
 His Pro Gly Val Val Arg Pro
 115

<210> 463
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 463
 gtgcacgggg tatgcgaggg atgcggcatt gccaccaatg ccgctgacct gcgcagatac
 60
 gaggcagctg gtgacgatga agtggtgcga tgcgaggaat gcgatcgtat cctggtgcgt
 120
 accggagagt ccatctgagc ccttcttggtg gcggtgatgc cgggatatcc gtagaattag
 180
 cggtcggacg agccatccgg gtgatcgcg cagcgggtgag ttgtcgagga aagtccgggc
 240
 tccatagagc aggggtggtgg gtaacgcccc cccggggtga cccgcgggaa agtgccacag
 300
 agaacagact gccggtttcg agccgggtgag ggtgaaacgg tggagtaagt gcccaccgcg
 360
 tcatcggtga cggtgacggc atggcaaacc ccacctggag caaggccaag aagaccgtga
 420
 ggtcgcggac gcgt
 434

<210> 464
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 464
 Met Pro Ser Pro Ser Pro Met Thr Arg Trp Ala Leu Thr Pro Pro Phe

```

      1             5             10             15
His Pro His Arg Leu Glu Thr Gly Ser Leu Phe Ser Val Ala Leu Ser
      20             25             30
Arg Gly Ser Pro Arg Val Gly Val Thr His His Pro Ala Leu Trp Ser
      35             40             45
Pro Asp Phe Pro Arg Gln Leu Thr Ala Ala Ala Ile Thr Arg Met Ala
      50             55             60
Arg Pro Thr Ala Asn Ser Thr Asp Ile Pro Ala Ser Pro Pro Gln Glu
65             70             75             80
Gly Leu Arg Trp Thr Leu Arg Tyr Ala Pro Gly Tyr Asp Arg Ile Pro
      85             90             95
Arg Ile Ala Pro Leu His Arg His Gln Leu Pro Arg Ile Cys Ala Gly
      100            105            110
Gln Arg His Trp Trp Gln Cys Arg Ile Pro Arg Ile Pro Arg Ala
      115            120            125

```

<210> 465

<211> 438

<212> DNA

<213> Homo sapiens

<400> 465

```

gatcatttag aatttatgga agaagctgat gtgaaagcta tgggtcaaatac tggcactgtg
60
gctgtattgc taccaggagc attttacacc ttgaaagaaa ctcaacttcc accgatgaat
120
ttgttacgtc agtacggagt agacattgct atttcgacgg atgctaatacc agggacgtcg
180
ccagcgttat cattacgggt aatgatgaat atggcatgta ccttgtttgg tatgacacct
240
gaaaccgccc ttgcaggggt aacaattcat gcggcaaaag cgttggggat tagcgattct
300
catggcactt tagaagttgg caaggtagct gattttgtct gctgggatgt ggaaagcccc
360
ggtgaacttt gttattgggt aggagagcag ttagtaaagc aacgtattca gcacggagta
420
tcccatgaat aatctaga
438

```

<210> 466

<211> 143

<212> PRT

<213> Homo sapiens

<400> 466

```

Asp His Leu Glu Phe Met Glu Glu Ala Asp Val Lys Ala Met Val Lys
      1             5             10             15
Ser Gly Thr Val Ala Val Leu Leu Pro Gly Ala Phe Tyr Thr Leu Lys
      20             25             30
Glu Thr Gln Leu Pro Pro Met Asn Leu Leu Arg Gln Tyr Gly Val Asp
      35             40             45
Ile Ala Ile Ser Thr Asp Ala Asn Pro Gly Thr Ser Pro Ala Leu Ser
      50             55             60
Leu Arg Leu Met Met Asn Met Ala Cys Thr Leu Phe Gly Met Thr Pro

```

```

65          70          75          80
Glu Thr Ala Leu Ala Gly Val Thr Ile His Ala Ala Lys Ala Leu Gly
          85          90          95
Ile Ser Asp Ser His Gly Thr Leu Glu Val Gly Lys Val Ala Asp Phe
          100          105          110
Val Cys Trp Asp Val Glu Ser Pro Gly Glu Leu Cys Tyr Trp Leu Gly
          115          120          125
Glu Gln Leu Val Lys Gln Arg Ile Gln His Gly Val Ser His Glu
          130          135          140

```

<210> 467

<211> 460

<212> DNA

<213> Homo sapiens

<400> 467

```

ntttccctgg ctattggcca tgtgggacac aacgttccgc ctaccccaga gcggttaagc
60
tgcattccctg caccttcttc toccaccgct tcaaagccac agtgagggaac ttccggagctt
120
ctcgcagtga agatggcggt ggaggaatgg atgccctggc tagaagaggc ggaatatctg
180
ttgattgtgt ggaccgacca caaaaacctg gagtatctcc acacaaccaa gtgcctcaac
240
tccaggcaag caagaagggc ccagctgttt acctgggttcc acttttccct ctccctaccgg
300
ccgggggtcca agaaccatcag gctggatgcc ctttcttgcc actttatggg catggggccca
360
ttccctccagg cttgcctgtc acccggtc ccgtcaaacc ctggccttcg tgcgacaaca
420
ctcttggtgc cttctatggt tctgtatggt gccgcaattg
460

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<210> 468

<211> 118

<212> PRT

<213> Homo sapiens

<400> 468

```

Gly Thr Ser Glu Leu Leu Ala Val Lys Met Ala Leu Glu Glu Trp Met
1          5          10          15
Pro Trp Leu Glu Glu Ala Glu Tyr Leu Leu Ile Val Trp Thr Asp His
          20          25          30
Lys Asn Leu Glu Tyr Leu His Thr Thr Lys Cys Leu Asn Ser Arg Gln
          35          40          45
Ala Arg Arg Ala Gln Leu Phe Thr Trp Phe His Phe Ser Leu Ser Tyr
          50          55          60
Arg Pro Gly Ser Lys Asn Ile Arg Leu Asp Ala Leu Ser Cys His Phe
65          70          75          80
Met Gly Met Gly Pro Phe Leu Gln Ala Cys Leu Ser Pro Gly Leu Pro
          85          90          95
Ser Asn Pro Gly Leu Arg Ala Thr Thr Leu Leu Val Pro Ser Met Val
          100          105          110
Leu Tyr Val Ala Ala Ile

```

115

<210> 469
 <211> 381
 <212> DNA
 <213> Homo sapiens

<400> 469
 cttgtgcaca cgttattttt ccaatacaaa tagtttaaaa agtaaactcc aaatacctat
 60
 aagccccctc aaagcacctt ccaaatatga accttggtta tgcccaaggt ccagaggggt
 120
 cccccagaaa ggcccaggag cctggggcat gggaaagctg tcgggggtccc catgctgact
 180
 ccctggactc caagcgatat tccataaagc cagggcctcc tggctgcggg agggaggcct
 240
 tgacccaaaa tccattcggc cctggatact ggagaggcag aggcctctgc tgatgagaag
 300
 ccctgagttc ctggctagct gtggttaacc acaaaaaatg cgggggggtga tgattttcga
 360
 agtccatcgg caaagaaaga c
 381

<210> 470
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 470
 Met Asp Phe Glu Asn His His Pro Pro His Phe Leu Trp Leu Thr Thr
 1 5 10 15
 Ala Ser Gln Glu Leu Arg Ala Ser His Gln Gln Arg Pro Leu Pro Leu
 20 25 30
 Gln Tyr Pro Gly Pro Asn Gly Phe Trp Val Lys Ala Ser Leu Pro Gln
 35 40 45
 Pro Gly Gly Pro Gly Phe Met Glu Tyr Arg Leu Glu Ser Arg Glu Ser
 50 55 60
 Ala Trp Gly Pro Arg Gln Leu Ser His Ala Pro Gly Ser Trp Ala Phe
 65 70 75 80
 Leu Gly Asp Pro Ser Gly Pro Trp Ala Leu Thr Arg Phe Ile Phe Gly
 85 90 95
 Arg Cys Phe Glu Gly Ala Tyr Arg Tyr Leu Glu Phe Thr Phe
 100 105 110

<210> 471
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 471
 accggtgact acctgcagca ctggattgac atgggttaaaa agggcggcga ccgcatgcc
 60
 gaggtcttcc tgggttaactg gttccgcgcg gccgacgatg gccgcttcct gtggccgngg
 120

cttggcgaaa acttcccggg cctanagtgg atcatcgacc gcattgaagg caacgtagag
 180
 gccgaggaca cgggtggtcgg acgcaccgcc cgcgccgagg acatcgactt gcaaggcctt
 240
 gacttcgatg tcgacgacgt tcgcgccgca ctcgccgttg acccgaagga atgggaaggc
 300
 gatatgcaag acaacgccga gtacctgaac ttcttgggct cccgcgtgcc cgaggaagtg
 360
 tggaaccagt tccgcgcc
 378

<210> 472

<211> 126

<212> PRT

<213> Homo sapiens

<400> 472

Thr	Gly	Asp	Tyr	Leu	Gln	His	Trp	Ile	Asp	Met	Gly	Lys	Lys	Gly	Gly
1				5					10					15	
Asp	Arg	Met	Pro	Glu	Val	Phe	Leu	Val	Asn	Trp	Phe	Arg	Arg	Gly	Asp
			20					25					30		
Asp	Gly	Arg	Phe	Leu	Trp	Pro	Xaa	Leu	Gly	Glu	Asn	Phe	Pro	Val	Leu
			35				40					45			
Xaa	Trp	Ile	Ile	Asp	Arg	Ile	Glu	Gly	Asn	Val	Glu	Ala	Glu	Asp	Thr
			50			55				60					
Val	Val	Gly	Arg	Thr	Ala	Arg	Ala	Glu	Asp	Ile	Asp	Leu	Gln	Gly	Leu
65					70					75				80	
Asp	Phe	Asp	Val	Asp	Asp	Val	Arg	Ala	Ala	Leu	Ala	Val	Asp	Pro	Lys
				85					90					95	
Glu	Trp	Glu	Gly	Asp	Met	Gln	Asp	Asn	Ala	Glu	Tyr	Leu	Asn	Phe	Leu
			100					105					110		
Gly	Ser	Arg	Val	Pro	Glu	Glu	Val	Trp	Asn	Gln	Phe	Arg	Ala		
			115				120					125			

<210> 473

<211> 339

<212> DNA

<213> Homo sapiens

<400> 473

accggttggt gggggaaggg acccatccca tgccacctgt cctagaaaat gtttcccctt
 60
 gttgagcagc tgctggatct agggctgctg ggtctaagtc caaaaaggga aaaaggaaaa
 120
 aggcaccaag taaaagaagg gggaagctgc caaaaccccc cctgcaaaaa ctctcccacc
 180
 ctgcttccat ttccctctcc agggaacagg tgtacctccc ctctccctg tctctctcag
 240
 atgccccagg ggctctctac ttcatctctg ccgacctgc caggagtggc ctcaggggta
 300
 gaggctccta gttggagaat ttgcttgcag gaaggtgaa
 339

<210> 474

<211> 97
 <212> PRT
 <213> Homo sapiens

<400> 474
 Met Phe Pro Leu Val Glu Gln Leu Leu Asp Leu Gly Leu Leu Gly Leu
 1 5 10 15
 Ser Pro Lys Arg Glu Lys Gly Lys Arg His Gln Val Lys Glu Gly Gly
 20 25 30
 Ser Cys Gln Asn Pro Pro Cys Gln Asn Ser Pro Thr Leu Leu Pro Phe
 35 40 45
 Pro Ser Pro Gly Asn Arg Cys Thr Ser Pro Pro Pro Cys Pro Pro Gln
 50 55 60
 Met Pro Gln Gly Leu Ser Thr Ser Phe Leu Pro Thr Leu Pro Gly Val
 65 70 75 80
 Ala Ser Gly Val Glu Ala Pro Ser Trp Arg Ile Cys Leu Gln Glu Gly
 85 90 95
 Glu

<210> 475
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 475
 acgcgtgaag ggtccctcc aaactctgag cctccttcca agccttgctg ggagctcccc
 60
 agcgccctgcc ggagaggcct ctccctccagg cgggcttccc gcgccgatgt gaaggagagg
 120
 ctgccccaga ggggtctgga tcgtaatcca gaaagggaca gtccacacagc cataatcccc
 180
 aatgctggga ctcttcagta aaggaagaga tggctttttc gttcatctgc ctttctgaaa
 240
 ggtaaaatat ctccagatcc gggctctctg ggcgactgcg tatgtggggg tccctgaagc
 300
 ctttgatgga tcttggttaga agtgggttgt tcatcttggg gtttt
 345

<210> 476
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 476
 Met Asn Asn Pro Leu Leu Thr Arg Ser Ile Lys Gly Phe Arg Asp Pro
 1 5 10 15
 His Ile Arg Ser Arg Pro Glu Ser Pro Asp Leu Glu Ile Phe Tyr Leu
 20 25 30
 Ser Glu Arg Gln Met Asn Glu Lys Ala Ile Ser Ser Phe Thr Glu Glu
 35 40 45
 Ser Gln His Ser Gly Leu Trp Leu Trp Asp Cys Pro Phe Leu Asp Tyr
 50 55 60
 Asp Pro Asp Pro Ser Gly Ala Ala Ser Pro Ser His Arg Arg Gly Lys

65		70		75		80									
Pro	Ala	Trp	Arg	Arg	Gly	Leu	Ser	Gly	Arg	Arg	Trp	Gly	Ala	Pro	Ser
		85		90		95									
Lys	Ala	Trp	Lys	Glu	Ala	Gln	Ser	Leu	Glu	Gly	Thr	Leu	His	Ala	
		100		105		110									

<210> 477

<211> 422

<212> DNA

<213> Homo sapiens

<400> 477

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acgcgtggcc gagccagcgt gctcaaggaa atgggtcaacg gcactcttat taacggctgg
60
gactctcccg aggtggaacg ggcactggac ctgtgcatgg cgtgcaaagg gtgcgcccga
120
gattgccccca ccggaatcga catggccagc taccgcagca cggttcttga cgaaaaatac
180
cgtcaccgtc tccgccctcg ctcccacctg acgatggggc tgctgcccac gtgggaacgt
240
ttgctcaatc ggaccccagg agcgccgtcg ctggctaacg cagtgccttc gatgcgggtc
300
ttcgcacgtc ttgctagatg gacagccggg gtggatcagc gtcgtcccct ccccgattc
360
cagccctcgg ccagattggc cagtccgcag gccgccccgg ttaaggagat tgtggcggat
420
cc
422

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<210> 478

<211> 140

<212> PRT

<213> Homo sapiens

<400> 478

Thr	Arg	Gly	Arg	Ala	Ser	Val	Leu	Lys	Glu	Met	Val	Asn	Gly	Thr	Leu
1				5					10					15	
Ile	Asn	Gly	Trp	Asp	Ser	Pro	Glu	Val	Glu	Arg	Ala	Leu	Asp	Leu	Cys
		20					25					30			
Met	Ala	Cys	Lys	Gly	Cys	Ala	Arg	Asp	Cys	Pro	Thr	Gly	Ile	Asp	Met
		35				40					45				
Ala	Ser	Tyr	Arg	Ser	Thr	Val	Leu	Asp	Glu	Lys	Tyr	Arg	His	Arg	Leu
	50				55				60						
Arg	Pro	Arg	Ser	His	Leu	Thr	Met	Gly	Leu	Leu	Pro	Met	Trp	Glu	Arg
65				70				75					80		
Leu	Leu	Asn	Arg	Thr	Pro	Gly	Ala	Pro	Ser	Leu	Ala	Asn	Ala	Val	Leu
		85				90						95			
Ser	Met	Pro	Val	Phe	Ala	Arg	Leu	Ala	Arg	Trp	Thr	Ala	Gly	Val	Asp
		100				105					110				
Gln	Arg	Arg	Pro	Leu	Pro	Arg	Phe	Gln	Pro	Ser	Ala	Arg	Leu	Ala	Ser
	115					120					125				
Pro	Gln	Ala	Ala	Pro	Val	Lys	Glu	Ile	Val	Ala	Asp				
	130					135				140					

<210> 479
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 479
 cgcgtggcca ttggccgggc gctggtgcgg caccgcgcac tggtgattgc cgatgagccg
 60
 atctcggcgt tggacatgac catccagaag cagattcttg agctgttcga ggcctgcag
 120
 gcgcagtacg gctttgcctg cctgttcac tcccacgacc tggcagcggg ggaacgcac
 180
 gcccaccggg tggcggatgat gagcgagggc aggggtggtg aaatgggtgc ccgcgacgag
 240
 atcttcgacc gcccgagca cccctacacc cgcaagctgc tggccgccgc cagccccttg
 300
 gagaaacttg aaaacggtgg ctaccgcatc cgccagggcc ccgtaccg
 348

<210> 480
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 480
 Arg Val Ala Ile Gly Arg Ala Leu Val Arg His Pro Arg Leu Val Ile
 1 5 10 15
 Ala Asp Glu Pro Ile Ser Ala Leu Asp Met Thr Ile Gln Lys Gln Ile
 20 25 30
 Leu Glu Leu Phe Glu Arg Leu Gln Ala Gln Tyr Gly Phe Ala Cys Leu
 35 40 45
 Phe Ile Ser His Asp Leu Ala Ala Val Glu Arg Ile Ala His Arg Val
 50 55 60
 Ala Val Met Ser Glu Gly Arg Val Val Glu Met Gly Ala Arg Asp Glu
 65 70 75 80
 Ile Phe Asp Arg Pro Gln His Pro Tyr Thr Arg Lys Leu Leu Ala Ala
 85 90 95
 Ala Ser Pro Leu Glu Lys Leu Glu Asn Gly Gly Tyr Arg Ile Arg Gln
 100 105 110
 Gly Pro Val Pro
 115

<210> 481
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 481
 aagcttctga ctgtggcatt ctccctgctt aatatgtcct caatatcccc tacttactgg
 60
 gcaaaatcct gcttatgctt tgggactagc tcaaagacca ctcccttgga tgggtgccttc
 120
 cctgccctgc cggttgccgc tggcttcctc agtggttagga ttaccatcac attgcatcat
 180

gagagcagaa gaccatctcc atgtgactgc tgcccctgct cccagcaggg ccacacaan
 240
 cccagtccag gacctggctc acgctgggtg gcggtatgcc aggaatgggg ctctggatct
 300
 gcctcttctc ctgcaggacc aggaaaccgc tgccctgtcc ctgccccagg aaaccctcag
 360
 taaatcccca gtcatttgag tttccctca ggcgcagaga ccaataacac atctccacca
 420
 acctgaaaaa ccttcacgcg t
 441

<210> 482

<211> 120

<212> PRT

<213> Homo sapiens

<400> 482

Lys	Leu	Leu	Thr	Val	Ala	Phe	Ser	Leu	Leu	Asn	Met	Ser	Ser	Ile	Ser
1				5					10					15	
Pro	Thr	Tyr	Trp	Ala	Lys	Ser	Cys	Leu	Cys	Phe	Gly	Thr	Ser	Ser	Lys
			20					25					30		
Thr	Thr	Pro	Leu	Asp	Gly	Ala	Phe	Pro	Ala	Leu	Pro	Ala	Cys	Ala	Gly
		35				40						45			
Phe	Leu	Ser	Val	Arg	Ile	Thr	Ile	Thr	Leu	His	His	Glu	Ser	Arg	Arg
	50					55				60					
Pro	Ser	Pro	Cys	Asp	Cys	Cys	Pro	Cys	Ser	Gln	Gln	Gly	Pro	Gln	Xaa
65				70					75					80	
Pro	Ser	Pro	Gly	Pro	Gly	Ser	Arg	Trp	Val	Ala	Asp	Ala	Gln	Glu	Trp
			85					90					95		
Gly	Ser	Gly	Ser	Ala	Ser	Ser	Pro	Ala	Gly	Pro	Gly	Asn	Arg	Cys	Pro
			100				105						110		
Val	Pro	Ala	Pro	Gly	Asn	Pro	Gln								
		115				120									

<210> 483

<211> 330

<212> DNA

<213> Homo sapiens

<400> 483

acgcgttcat tccctgatgg ccacgcacga gctaacggag ggatggggcg aaggggaaggc
 60
 caagggttgcc tcgaagacca aggagtgtgc agggcaggac ctcgttttaa aggaatatcc
 120
 tctcaccaga gacacgcggc ggccaggcag ggccggagcg gggcctgtgc ccagggtccg
 180
 agcgtctgcc cagcccagca tccctgtccc cagccaggaa tatgtcttcg tggcatagag
 240
 ggagctcttg gagccacacc tgcgtgtgca catgtgtcac cccactgctg ggaggggctc
 300
 tcccgggacc ctgcagcgtg ggctgggccc
 330

<210> 484

<211> 96
 <212> PRT
 <213> Homo sapiens

<400> 484
 Met Gly Arg Arg Glu Gly Gln Gly Cys Leu Glu Asp Gln Gly Val Cys
 1 5 10 15
 Arg Ala Gly Pro Arg Phe Lys Gly Ile Ser Ser His Gln Arg His Ala
 20 25 30
 Ala Ala Arg Gln Gly Arg Ser Gly Ala Cys Ala Gln Ala Pro Ser Val
 35 40 45
 Cys Pro Ala Gln His Pro Cys Pro Gln Pro Gly Ile Cys Leu Arg Gly
 50 55 60
 Ile Glu Gly Ala Leu Gly Ala Thr Pro Ala Cys Ala His Val Ser Pro
 65 70 75 80
 His Cys Trp Glu Gly Leu Ser Arg Asp Pro Ala Ala Trp Ala Gly Pro
 85 90 95

<210> 485
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 485
 acgcgtgctc gcgcggacga agtcggcgct gatcgcccag tcatgcgcc tgcccggtgcc
 60
 gccagttcg gcgatcgccg cattcggccg gccggaatcg agaaggaatg cgtggacgta
 120
 cgggggatac caaaggaatc ttgtcgaggg cttcgcgcc ctcgacgtgg atcacctgta
 180
 cccgacggac gtggggaagc cgccccgcaa gctcacggga ctccgcgaca tcgatgtgcg
 240
 atacgatttg caccgtcgtc ggctgcgtgc gcgacacatg ctccgcgatc gcctcagcgg
 300
 tggtttccga cgtcagcagg aacgtggcga cgggtggcat ggcggtcgcc gttatgtcgg
 360
 cattccatt cctcggg
 377

<210> 486
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 486
 Met Arg Pro Ala Arg Ala Ala Gln Phe Gly Asp Arg Arg Ile Arg Pro
 1 5 10 15
 Ala Gly Ile Glu Lys Glu Cys Val Asp Val Arg Gly Ile Pro Lys Glu
 20 25 30
 Ser Cys Arg Gly Leu Arg Gly Pro Arg Arg Gly Ser Pro Val Pro Asp
 35 40 45
 Gly Arg Gly Glu Ala Val Pro Gln Ala His Gly Thr Pro Arg His Arg
 50 55 60
 Cys Ala Ile Arg Phe Ala Pro Ser Ser Ala Ala Cys Ala Thr His Ala

```

65              70              75              80
Pro Arg Ser Pro Gln Arg Trp Phe Pro Thr Ser Ala Gly Thr Trp Arg
              85              90              95
Arg Val Ala Trp Arg Ser Pro Leu Cys Arg His Ser His Ser Ser
              100              105              110

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<210> 487
 <211> 459
 <212> DNA
 <213> Homo sapiens

```

<400> 487
nnacgcgtaa gatcgattgt ggatcagcac cgatgctggt ccccccgcacg ttgttgttgg
60
cgggtgttgt tgtaaggagt gtgtgtgatg cgtgttggtg ttctactga ggttaagaat
120
agtgagtttc gtgtggctgt gacgccggcg ggtgttcattg cgttggttgg tcgtggatc
180
gaggtgttgg ttcaggctgg tgctggtgtg ggttcgggta ttccggattc ggattttgtg
240
ggtgctggtg cgccgggtgt gggatgatgt gagtcggtgt ggggtgatgc tgatttggtg
300
ttgaagggtga aggagcctgt tgcggaggag tatgggcggt tgcattgaggg tttggttctt
360
tttacgtatc ttcatttggc tgctgatgag gcgttgactc gtgagctttt ggggcgtggg
420
gtgacgtcga ttgcgtatga gacggtggag ttggccgat
459

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<210> 488
 <211> 124
 <212> PRT
 <213> Homo sapiens

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<400> 488
Met Arg Val Gly Val Pro Thr Glu Val Lys Asn Ser Glu Phe Arg Val
1      5      10      15
Ala Val Thr Pro Ala Gly Val His Ala Leu Val Gly Arg Gly His Glu
20     25     30
Val Leu Val Gln Ala Gly Ala Gly Val Gly Ser Gly Ile Pro Asp Ser
35     40     45
Asp Phe Val Gly Ala Gly Ala Arg Val Val Gly Asp Val Glu Ser Val
50     55     60
Trp Gly Asp Ala Asp Leu Val Leu Lys Val Lys Glu Pro Val Ala Glu
65     70     75     80
Glu Tyr Gly Arg Leu His Glu Gly Leu Val Leu Phe Thr Tyr Leu His
85     90     95
Leu Ala Ala Asp Glu Ala Leu Thr Arg Glu Leu Leu Gly Arg Gly Val
100    105    110
Thr Ser Ile Ala Tyr Glu Thr Val Glu Leu Ala Asp
115    120

```

<210> 489
 <211> 542

<212> DNA

<213> Homo sapiens

<400> 489

nacgcgtttg gcgtactgag tgcggtggtg gatggcgacg acagtggcaa gccgctgctc
 60
 aaccagcacg gttgctacaa agtgcgcttt ccatttaccc gcgatcaaaa gccagcact
 120
 cgggggttcgg catggctgcg caggggtgctg ttgtctgccg gttccagcca tggcatgcac
 180
 tttccgctgc tcaaaggcag tgaagtgttg gtgtcatttc tggggggcga ccccgaccgg
 240
 ccgattatcg ttggctgcgt accaaactcg gaaaccccga gcatggctcg tgagcgtaac
 300
 gccaccacga gcggcttctc cacggccgga gggcacttcc tggcgatgga agaccacccc
 360
 ggggctgccc atctgaagct gggtgcgccct ggcggcaaca gcgtcttcac actgggcaat
 420
 ggcaaagtcg ccggcgcgca actgcgcacc aacgcccac atgcaattga catcgtcttc
 480
 gctcaaacac gaagtgccg gcgtgtactc attgtcgatg ggcaccgggg acccggcggc
 540
 cg
 542

<210> 490

<211> 180

<212> PRT

<213> Homo sapiens

<400> 490

Xaa	Ala	Phe	Gly	Val	Leu	Ser	Ala	Val	Val	Asp	Gly	Asp	Asp	Ser	Gly
1				5					10					15	
Lys	Pro	Leu	Leu	Asn	Gln	His	Gly	Cys	Tyr	Lys	Val	Arg	Phe	Pro	Phe
		20						25					30		
Thr	Arg	Asp	Gln	Lys	Pro	Ser	Thr	Arg	Gly	Ser	Ala	Trp	Leu	Arg	Arg
		35					40					45			
Val	Ser	Leu	Ser	Ala	Gly	Ser	Ser	His	Gly	Met	His	Phe	Pro	Leu	Leu
		50				55					60				
Lys	Gly	Ser	Glu	Val	Leu	Val	Ser	Phe	Leu	Gly	Gly	Asp	Pro	Asp	Arg
65					70					75				80	
Pro	Ile	Ile	Val	Gly	Cys	Val	Pro	Asn	Ser	Glu	Thr	Pro	Ser	Met	Val
			85					90					95		
Val	Glu	Arg	Asn	Ala	Thr	Gln	Ser	Gly	Phe	Ser	Thr	Ala	Gly	Gly	His
			100					105					110		
Phe	Leu	Ala	Met	Glu	Asp	His	Pro	Gly	Ala	Ala	His	Leu	Lys	Leu	Gly
		115					120					125			
Ala	Pro	Gly	Gly	Asn	Ser	Val	Phe	Thr	Leu	Gly	Asn	Gly	Lys	Val	Ala
		130				135					140				
Gly	Ala	Gln	Leu	Arg	Thr	Asn	Ala	Pro	His	Ala	Ile	Asp	Ile	Val	Phe
145					150					155				160	
Ala	Gln	Thr	Arg	Ser	Ala	Arg	Arg	Val	Leu	Ile	Val	Asp	Gly	His	Arg
			165					170					175		
Gly	Pro	Gly	Gly												

180

<210> 491
 <211> 825
 <212> DNA
 <213> Homo sapiens

<400> 491
 nacgcgtcga ggcgacggtc ggcgccgtca tggcgactgt tctcgagggc acatgggaac
 60
 gcatcgggtgc eggattccgg actgccttaa ccacagcctt ggaacgcacc gatgaatggg
 120
 tgggcggccc tgacagcaag cccctcaacg aagtcgagac actgcgccgg tgcgccgatg
 180
 aactcatcgg cgggcccgtc ggcgcggttg ccgcgatgca cggaggggtca atcgaattgg
 240
 tcgacgtgtc ggtcgggtgac gaagagcgca ggtcgcacgt caccatgaag ggagcatgcc
 300
 gaggttgccc ggcagccatc agaccctaca tcagcgccctg gaacatcaac tgagtctgcg
 360
 nattgcgcga gccggtcacc gtgcgggaaa tctgacacct actccgacag ctccacctcg
 420
 acgagcacct ccacgacgag gccaaagccac tcgtagacgc attcctcctc ggcatccaat
 480
 tcctcccggg ccgcccgagc gacttcgtcg gcagtaacct ggtcgatgat ccctagcctg
 540
 gcggccatca tgccacgcag cgcattgaca gtacgaagcc aacgttgcggt catcacaggg
 600
 ttcattggaga tacagccggt tcgggtgcaac gtctccacat cagcacttaa ggactgagcg
 660
 tcttcccagc gcgccgcgac atcctcggcg tcatgggtoga catggaattg cgcgtcagct
 720
 gagtcgtcgt cacgataggc gctgggcagg atcaatcgac gcacctcgtc gtctcctcgg
 780
 agtccagaaa actggctctc ccaaaaagcg aacgggtccc cctcc
 825

<210> 492
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 492
 Met Asn Gly Trp Ala Ala Leu Thr Ala Ser Pro Ser Thr Lys Ser Arg
 1 5 10 15
 His Cys Ala Gly Ala Pro Met Asn Ser Ser Ala Gly Pro Ser Ala Arg
 20 25 30
 Leu Pro Arg Cys Thr Glu Gly Gln Ser Asn Trp Ser Thr Cys Arg Ser
 35 40 45
 Val Thr Lys Ser Ala Glu Ser Thr Ser Pro
 50 55

<210> 493
 <211> 863

<212> DNA

<213> Homo sapiens

<400> 493

nacgcgttcc aacctcgtca aaacggctat cgcaggaaat gaccccaact ggggtcgcac
 60
 cctcgcggcg atcggatgtg ttcttgagaa tatagctccc ttcgatcccg accaggtgga
 120
 tgtgtccatc aatgacattc agatctgtaa ggccgggggt atcggggagg accgcaacct
 180
 cgtcgatatg aggccacgag aggttcacat cgatattgag ctgcatgcgg gtgatgccga
 240
 agctgcggta tggactaatg atctgaccca ccaatacgtc gaagagaata gcgcgtatac
 300
 atcatgaccc ttgctcttga catccccctc aacgactccc agttctcggc tcagcggaaa
 360
 tctgaggtcc tggtagaagc gctgccttgg atcaggcggg ttcagggccg cactgtcgtc
 420
 gtgaaatatg gcggcaacgc gatggttgat cccggtctgc agcaggcctt cgccgacgac
 480
 attgtgttta tggcctctgt ggggattcgc cctattgtcg tccacggtgg tggccctcag
 540
 atcaatgcca tgcttgctga atccgctacc ccggtggagt tccgtaatgg tttgcgggtg
 600
 acatctccgg aggtcatgga ggttgtccgg atggtgctcg tcgggcaggg gggccgtcag
 660
 ctggttaacc gaatcaacgc ctatgcgccg ctacgagctg gcatgtcagg cgaggacttt
 720
 ggcctttttt cggcccggaa gtgcggggta attgttgatg gcgagcaa at agacatgggt
 780
 ttagtgggag acatcgttga cgtcaacatc gatctcgta tctctatgct tgatcgcggt
 840
 cagattccgg tcattgcacc ggt
 863

<210> 494

<211> 186

<212> PRT

<213> Homo sapiens

<400> 494

Met Thr Leu Ala Leu Asp Ile Pro Leu Asn Asp Ser Gln Phe Ser Ala
 1 5 10 15
 Gln Arg Lys Ser Glu Val Leu Val Glu Ala Leu Pro Trp Ile Arg Arg
 20 25 30
 Phe Gln Gly Arg Thr Val Val Val Lys Tyr Gly Gly Asn Ala Met Val
 35 40 45
 Asp Pro Gly Leu Gln Gln Ala Phe Ala Asp Asp Ile Val Phe Met Ala
 50 55 60
 Ser Val Gly Ile Arg Pro Ile Val Val His Gly Gly Gly Pro Gln Ile
 65 70 75 80
 Asn Ala Met Leu Ala Glu Ser Ala Thr Pro Val Glu Phe Arg Asn Gly
 85 90 95
 Leu Arg Val Thr Ser Pro Glu Val Met Glu Val Val Arg Met Val Leu


```

      100      105      110
Val Gly Gln Val Gly Arg Gln Leu Val Asn Arg Ile Asn Ala Tyr Ala
      115      120      125
Pro Leu Ala Ala Gly Met Ser Gly Glu Asp Phe Gly Leu Phe Ser Ala
      130      135      140
Arg Lys Ser Arg Val Ile Val Asp Gly Glu Gln Ile Asp Met Gly Leu
      145      150      155      160
Val Gly Asp Ile Val Asp Val Asn Ile Asp Leu Val Ile Ser Met Leu
      165      170      175
Asp Arg Gly Gln Ile Pro Val Ile Ala Pro
      180      185

```

<210> 495
 <211> 514
 <212> DNA
 <213> Homo sapiens

```

<400> 495
gcgcgcgaca ccgggtgcccc gattagcgtg ccagtgggtg acgtcactaa gggtcacgtc
60
tggaatgtga caggtgacgt tcttaacgcc ngatccctcc acaatcgagg tgacnntgag
120
cgttggccga tccaccggga tccccgggcc ttcatgacc ttgagcccga gaccgagatg
180
ctggagaccg gtattaaggt ccttgacttg ctgactcctt acgtcaaggg cggcaagatt
240
ggcctctttg gcggcgctgg tgtgggtaag acggtgctca ttcaggagat gatttaccgt
300
atcgcccaca acttcggcgg tacttcgggtt ttccgggtg tcggtgagcg taccgcgag
360
ggtaacgacc tcatcaacga gatggacgag gccggtgtgc tcaaagacac cgccctggta
420
ttcgccaga tggacgagcc cccgggcacg cggtacgagc tgtcgcgctg gcagccctgc
480
ggcccatgcc tggtaactg ctgtgggacc ttgg
514

```

<210> 496
 <211> 171
 <212> PRT
 <213> Homo sapiens

```

<400> 496
Ala Arg Asp Thr Gly Ala Pro Ile Ser Val Pro Val Gly Asp Val Thr
1      5      10      15
Lys Gly His Val Trp Asn Val Thr Gly Asp Val Leu Asn Ala Xaa Ser
      20      25      30
Leu His Asn Arg Gly Asp Xaa Glu Arg Trp Pro Ile His Arg Asp Pro
      35      40      45
Pro Ala Phe Asp Asp Leu Glu Pro Glu Thr Glu Met Leu Glu Thr Gly
      50      55      60
Ile Lys Val Leu Asp Leu Leu Thr Pro Tyr Val Lys Gly Gly Lys Ile
65      70      75      80
Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val Leu Ile Gln Glu

```

```

      85              90              95
Met Ile Tyr Arg Ile Ala His Asn Phe Gly Gly Thr Ser Val Phe Ala
      100              105              110
Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu Ile Asn Glu Met
      115              120              125
Asp Glu Ala Gly Val Leu Lys Asp Thr Ala Leu Val Phe Gly Gln Met
      130              135              140
Asp Glu Pro Pro Gly Thr Arg Tyr Glu Leu Ser Arg Trp Gln Pro Cys
145              150              155              160
Gly Pro Cys Leu Val Asn Cys Cys Gly Thr Leu
      165              170

```

<210> 497
 <211> 662
 <212> DNA
 <213> Homo sapiens

```

<400> 497
acgcgtcctg ggatctcaac cccagcagtc tggtttgttt ctcattccca caatttcctg
60
ggttccacca agcagcgaaa actgccagga tgaatgagga aaaaaccag cccacaaaac
120
gagacacacg ctggcgggga gagacgcagc agagctcctt cctgtctgtg gactcggagc
180
aaagacgtgg ggccccatct tttgtgtttt cctcaagcgg ggaaagaatg gactgtttgc
240
atgcttcgtg ccacacgccc gcggtgatcc cagccagggc cccgagcgca gaggcggagc
300
tgtgctcagc acaggcctgg gacctcccc ggcaggcacc tgtgggggggt gcagcccccg
360
ggaaggaggc aactgcctca cttaacatcc tccgctgcaa ggtggtggcg ccgagaggcg
420
tgtctgtgaa gacaggtacc aggatggcag gacccgcacg cctcttccca cacctgtcag
480
cttcggaagc atctctcgag gactctggtc ccaggatgtc tcccaggaca agccagtctg
540
cctcttcttc ctacttctgc tgtagcctgg gaccagacct ggccaaggtc agccagcggg
600
gagggccgag gtctgagctc tcgtcctgcc gtggcccccg cgatggcttg gggtgcaagc
660
tt
662

```

<210> 498
 <211> 191
 <212> PRT
 <213> Homo sapiens

```

<400> 498
Met Asn Glu Glu Lys Thr Gln Pro His Lys Arg Asp Thr Arg Trp Arg
1      5      10      15
Gly Glu Thr Gln Gln Ser Ser Phe Leu Ser Val Asp Ser Glu Gln Arg
20      25      30
Arg Gly Ala Pro Ser Phe Val Phe Ser Ser Ser Gly Glu Arg Met Asp

```

```

      35              40              45
Cys Leu His Ala Ser Cys His Thr Pro Ala Val Ile Pro Ala Arg Ala
  50              55              60
Pro Ser Ala Glu Ala Glu Leu Cys Ser Ala Gln Ala Trp Asp Leu Pro
  65              70              75              80
Arg Gln Ala Pro Val Gly Gly Ala Ala Pro Gly Lys Glu Ala Thr Ala
      85              90              95
Ser Leu Asn Ile Leu Arg Cys Lys Val Val Ala Pro Arg Gly Val Ser
      100              105              110
Val Lys Thr Gly Thr Arg Met Ala Gly Pro Ala Arg Leu Phe Pro His
      115              120              125
Leu Ser Ala Ser Glu Ala Ser Leu Glu Asp Ser Gly Pro Arg Met Ser
      130              135              140
Pro Arg Thr Ser Gln Ser Ala Ser Ser Ser Tyr Phe Cys Cys Ser Leu
      145              150              155              160
Gly Pro Asp Leu Ala Lys Val Ser Gln Arg Gly Gly Pro Arg Ser Glu
      165              170              175
Leu Ser Ser Cys Arg Gly Pro Arg Asp Gly Leu Gly Cys Lys Leu
      180              185              190

```

<210> 499

<211> 444

<212> DNA

<213> Homo sapiens

<400> 499

```

acgcgtgaag ggtgggcagt gttgagctga gtgagccctc ctcctgcaa tgctggagcc
  60
ctgccttctg cctgaccctc tggcttcccta agcagtctat acgtgagaag ccctttcttc
  120
aagtgaaagc ttctgagctc actacgagag cactggagct ggaacctctc tgggttcaaa
  180
tcctcaactg gggggttgga ggagggttact tcactttctca aaacctcaat ttccttatct
  240
gcaaaatggg gtaataggag cccctcttca tcaatgcttg gagggaatgc ctggcacagt
  300
agggcagtta ccgtcatgga gaacagaaag gccccgagct atcctggatg tggtgagaa
  360
gggtcctgga tcctgctgc tcggcctttt cattctcttc ttcacctaca ggctcccaca
  420
aagggcctct gaaaacacag ggtg
  444

```

<210> 500

<211> 105

<212> PRT

<213> Homo sapiens

<400> 500

```

Met Thr Val Thr Ala Leu Leu Cys Gln Ala Phe Pro Pro Ser Ile Asp
  1              5              10              15
Glu Glu Gly Leu Leu Leu Pro His Phe Ala Asp Lys Glu Ile Glu Val
      20              25              30
Leu Arg Ser Glu Val Thr Ser Ser Asn Pro Pro Val Glu Asp Leu Asn

```

```

      35              40              45
Pro Glu Arg Phe Gln Leu Gln Cys Ser Arg Ser Glu Leu Arg Ser Phe
      50              55              60
His Leu Lys Lys Gly Leu Leu Thr Tyr Arg Leu Leu Arg Lys Pro Glu
65              70              75              80
Gly Gln Ala Glu Gly Arg Ala Pro Ala Leu Gln Gly Gly Gly Leu Thr
      85              90              95
Gln Leu Asn Thr Ala His Pro Ser Arg
      100              105

```

<210> 501
 <211> 800
 <212> DNA
 <213> Homo sapiens

<400> 501
 agatctgac cgagaagtgg ctgctcaggg aaatgactac tccatggctt tcttaactca
 60
 ggtactcctt attcaatgag aggcctgagg tgagaccgc catgcggcgc gtggatcgca
 120
 tgggttagt gcacactagc aaggggctta ggtctccagc tgaggtcaga tgcacacttg
 180
 gaccttgtag tggggagtaa cacacatctc tgtgttcagc gaaccatcca ggagctgttt
 240
 gaagtttatt ctcccatgga tgatgtgtgc ttcccggtca aagctgagga gtttgtggtg
 300
 ctttctcagg aaccttctgt cacggaaacc attgcacca aaattgcaag acctttcata
 360
 gaggcctca agagtattga gtatctggag gaggatgcc agaagtccgc acaggagggg
 420
 gtgctgggac cacacactga tgctctgtca tcagactctg agaacatgcc gtgtgatgaa
 480
 gaaccatccc aattagagga gctagctgac ttcattggagc agcttacacc aattgaaaaa
 540
 tatgctttaa attacctgga atcttgaggc agggcctgag agagcacgct gcgccgtact
 600
 tccagcagct gcggcagacc acggctccac gcctgctgca gttccctgag ctgaggctgg
 660
 tgcagttcga ctcaggtatg cggcagttgg gggcgtggcc cgtgcgggag ctgcactggc
 720
 cctggatgat gaggcgctct tgatgtgatt cgtttcccag ggaagttgga agcttttagct
 780
 atcttgcttc agaaactgaa
 800

<210> 502
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 502
 Met Asp Asp Ala Gly Phe Pro Val Lys Ala Glu Glu Phe Val Val Leu
 1 5 10 15
 Ser Gln Glu Pro Ser Val Thr Glu Thr Ile Ala Pro Lys Ile Ala Arg

```

                20                25                30
Pro Phe Ile Glu Ala Leu Lys Ser Ile Glu Tyr Leu Glu Glu Asp Ala
      35                40                45
Gln Lys Ser Ala Gln Glu Gly Val Leu Gly Pro His Thr Asp Ala Leu
      50                55                60
Ser Ser Asp Ser Glu Asn Met Pro Cys Asp Glu Glu Pro Ser Gln Leu
65                70                75                80
Glu Glu Leu Ala Asp Phe Met Glu Gln Leu Thr Pro Ile Glu Lys Tyr
      85                90                95
Ala Leu Asn Tyr Leu Glu Ser
                100

```

<210> 503

<211> 538

<212> DNA

<213> Homo sapiens

<400> 503

```

nnacgcggttg tcgtctctcc gatcattgat tttgttgat tctgcaatga tgtaaaggaa
60
gatgatgaca cggagaagtt taaagaagcc attgtgaaat ttcataggct gtttgggatg
120
ccagaggaag agaaactcgt caactattac tcttcgagct attggaaggg gaagggtccc
180
cgtcagggtt ggatgtacct cagcattaac cacctttgct tttattcttt tcttatggga
240
agggaagcga aactgggtcat ccggtgggta gacatcactc agcttgagaa gaatgcccc
300
ctgcttctgc ctgatgtgat caaagtgagc acacgggtcca gtgagcattt cttctctgta
360
ttcctcaaca tcaacgagac cttcaagtta atggagcagc ttgccaacat agccatgagg
420
caactcttag acaatgaggg atttgaacaa gatcgatccc tgcccaaact caaaaggaaa
480
tctcctaaaa aagtgtctgc tctaaaacgt gatcttgatg cctgggccct tcacgcgt
538

```

<210> 504

<211> 179

<212> PRT

<213> Homo sapiens

<400> 504

```

Xaa Arg Val Val Val Ser Pro Ile Ile Asp Phe Val Val Phe Cys Asn
1                5                10                15
Asp Val Lys Glu Asp Asp Asp Thr Glu Lys Phe Lys Glu Ala Ile Val
      20                25                30
Lys Phe His Arg Leu Phe Gly Met Pro Glu Glu Glu Lys Leu Val Asn
      35                40                45
Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Lys Val Pro Arg Gln Gly Trp
      50                55                60
Met Tyr Leu Ser Ile Asn His Leu Cys Phe Tyr Ser Phe Leu Met Gly
65                70                75                80
Arg Glu Ala Lys Leu Val Ile Arg Trp Val Asp Ile Thr Gln Leu Glu

```

```

      85              90              95
Lys Asn Ala Pro Leu Leu Leu Pro Asp Val Ile Lys Val Ser Thr Arg
      100              105              110
Ser Ser Glu His Phe Phe Ser Val Phe Leu Asn Ile Asn Glu Thr Phe
      115              120              125
Lys Leu Met Glu Gln Leu Ala Asn Ile Ala Met Arg Gln Leu Leu Asp
      130              135              140
Asn Glu Gly Phe Glu Gln Asp Arg Ser Leu Pro Lys Leu Lys Arg Lys
145              150              155              160
Ser Pro Lys Lys Val Ser Ala Leu Lys Arg Asp Leu Asp Ala Trp Ala
      165              170              175
Leu His Ala

```

<210> 505
 <211> 381
 <212> DNA
 <213> Homo sapiens

```

<400> 505
gtgcacgaca ccgaacggta cgaacgtatc tcccaggcac gtcgcgagga acagcaggcc
60
atgctcgggt acgacngctc aagaacctgt cgcattgacct tgctcaccgg gcagctggac
120
gacccctcca cgactccttg cggacgctgc gacgtctgtg ctggcccgtg gtactcagtc
180
gaggtcgatc agtcagccgc tgtgagagcc gtccaatccc tcaaccgggt gggagttccg
240
gtggaaccac gcgcgcctg gcccgagggt atggacgccc tccaggttgc gctcaagggt
300
cgcatcagtg ccgaggagat cgctgcagag ggccgcgtca tcgccagact ctccgatctg
360
ggttggggag gggcgctgcg c
381

```

<210> 506
 <211> 127
 <212> PRT
 <213> Homo sapiens

```

<400> 506
Val His Asp Thr Glu Arg Tyr Glu Arg Ile Ser Gln Ala Arg Arg Glu
1      5      10      15
Glu Gln Gln Ala Met Leu Gly Tyr Asp Xaa Ser Arg Thr Cys Arg Met
20      25      30
Thr Leu Leu Thr Gly Gln Leu Asp Asp Pro Ser Thr Thr Pro Cys Gly
35      40      45
Arg Cys Asp Val Cys Ala Gly Pro Trp Tyr Ser Val Glu Val Asp Gln
50      55      60
Ser Ala Ala Val Arg Ala Val Gln Ser Leu Asn Arg Val Gly Val Pro
65      70      75      80
Val Glu Pro Arg Ala Ala Trp Pro Ala Gly Met Asp Ala Leu Gln Val
85      90      95
Ala Leu Lys Gly Arg Ile Ser Ala Glu Glu Ile Ala Ala Glu Gly Arg

```

	100		105		110									
Val	Ile	Ala	Arg	Leu	Ser	Asp	Leu	Gly	Trp	Gly	Gly	Ala	Leu	Arg
	115			120								125		

<210> 507

<211> 499

<212> DNA

<213> Homo sapiens

<400> 507

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gccggcgtgt tcaacctcat ggtgtgggcc ttcattaccg acgtcatcga tgcccaggag
60
gtcatgtccg gggagcgtga agacggtgtc atctatggcg tgaactcctt cgcccgcaaa
120
cttgcccagg ccattgccgg tggaaatcggc ggagccatgc tgacgatgat cggctaccag
180
tcctcctccc aagggtggtgc cgttcagtcg gagtccgtcg tcaatcacct gtacacgctc
240
gccaccgcca tcccgacgat ctgctgcctc ggcgctgccc tgctcatgct gggctaccgc
300
ctcaccgcgc acaagggtgt cgccaacgcc gacgagttgg ctcgtcgcca cgcagtacag
360
gccgagcaaa actcctgacc cataacggag gcacatcatg gacacgctca tgcggatcac
420
cgaccacttg acaacctcgc cgggtatcca attgaaaatt gacaagcgat ggggtgcctc
480
cgtcacattt gtgacgcgt
499

```

<210> 508

<211> 125

<212> PRT

<213> Homo sapiens

<400> 508

Ala	Gly	Val	Phe	Asn	Leu	Met	Val	Trp	Ala	Phe	Ile	Thr	Asp	Val	Ile
1				5					10					15	
Asp	Ala	Gln	Glu	Val	Met	Ser	Gly	Glu	Arg	Glu	Asp	Gly	Val	Ile	Tyr
		20					25						30		
Gly	Val	Asn	Ser	Phe	Ala	Arg	Lys	Leu	Ala	Gln	Ala	Ile	Ala	Gly	Gly
		35					40						45		
Ile	Gly	Gly	Ala	Met	Leu	Thr	Met	Ile	Gly	Tyr	Gln	Ser	Ser	Ser	Gln
		50				55					60				
Gly	Gly	Ala	Val	Gln	Ser	Glu	Ser	Val	Val	Asn	His	Leu	Tyr	Thr	Leu
65				70					75					80	
Ala	Thr	Ala	Ile	Pro	Thr	Ile	Cys	Cys	Leu	Gly	Ala	Ala	Leu	Leu	Met
			85					90					95		
Leu	Gly	Tyr	Pro	Leu	Thr	Arg	Asp	Lys	Val	Val	Ala	Asn	Ala	Asp	Glu
		100					105					110			
Leu	Ala	Arg	Arg	His	Ala	Val	Gln	Ala	Glu	Gln	Asn	Ser			
	115					120					125				

<210> 509

<211> 360

<212> DNA

<213> Homo sapiens

<400> 509

ttggccatgg atttggtcgc caagttcagt cccaaagatg tcacgctcta tctaattggac
 60
 ttctgggacca atggtgtggc accactaggc caattaccac aggtggccga caccttgctt
 120
 ttggatcata cggagaagat tgccaagttt gtacgcatca tggagcggga gctcaaccgg
 180
 cgtaagaagc tcttgtccga ctacgggtgtt ggtacactag agctctaccg tcaggctagc
 240
 ggtcagcaag agccggccat cgtcatcctg ctggacagtt atgagtccat gaaggaagag
 300
 gcctatgaag cggagctctt cacgctcttg gtgcggatct cccgggaagg tctcagcatc
 360

<210> 510

<211> 120

<212> PRT

<213> Homo sapiens

<400> 510

Leu	Ala	Met	Asp	Leu	Ala	Arg	Lys	Phe	Ser	Pro	Lys	Asp	Val	Thr	Leu
1				5					10					15	
Tyr	Leu	Met	Asp	Phe	Gly	Thr	Asn	Gly	Val	Ala	Pro	Leu	Gly	Gln	Leu
			20					25					30		
Pro	Gln	Val	Ala	Asp	Thr	Leu	Leu	Leu	Asp	His	Thr	Glu	Lys	Ile	Ala
			35				40					45			
Lys	Phe	Val	Arg	Ile	Met	Glu	Arg	Glu	Leu	Asn	Arg	Arg	Lys	Lys	Leu
	50				55					60					
Leu	Ser	Asp	Tyr	Gly	Val	Gly	Thr	Leu	Glu	Leu	Tyr	Arg	Gln	Ala	Ser
65				70					75					80	
Gly	Gln	Gln	Glu	Pro	Ala	Ile	Val	Ile	Leu	Leu	Asp	Ser	Tyr	Glu	Ser
			85					90						95	
Met	Lys	Glu	Glu	Ala	Tyr	Glu	Ala	Glu	Leu	Phe	Thr	Leu	Leu	Val	Arg
			100					105						110	
Ile	Ser	Arg	Glu	Gly	Leu	Ser	Ile								
			115				120								

<210> 511

<211> 361

<212> DNA

<213> Homo sapiens

<400> 511

ntgcgaacc gcggctatgc ggtgctccag cccaatttcc gcggatcggg cggttatggc
 60
 actgcgttcg gcgatgccgg catcggccag atcgggcgca agatgcagga cgatctcgac
 120
 gacgggatgg actggctggt caaggagggc atcgtcgaca agggccgggt gtgcatcgtc
 180
 ggggcctcct atggcggcta tgccgcgatg tggggcgaga tccgcaatcc cgaacgctat
 240

cgctgcgcgg cgagcctggc ggggggttgcc gattaaggcc atgctcaaataa acccggcg
 300
 ctatctcgac aaggaggcgg gcaagcgctg gccgccccgn tcaaccggcg aaccggaatt
 360
 c
 361

<210> 512
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 512
 Xaa Ala Asn Arg Gly Tyr Ala Val Leu Gln Pro Asn Phe Arg Gly Ser
 1 5 10 15
 Gly Gly Tyr Gly Thr Ala Phe Gly Asp Ala Gly Ile Gly Gln Ile Gly
 20 25 30
 Arg Lys Met Gln Asp Asp Leu Asp Asp Gly Met Asp Trp Leu Val Lys
 35 40 45
 Glu Gly Ile Val Asp Lys Gly Arg Val Cys Ile Val Gly Ala Ser Tyr
 50 55 60
 Gly Gly Tyr Ala Ala Met Trp Gly Ala Ile Arg Asn Pro Glu Arg Tyr
 65 70 75 80
 Arg Cys Ala Ala Ser Leu Ala Gly Val Ala Asp
 85 90

<210> 513
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 513
 nnatgcagac tagaagatgg catgacgggt ttggctggcg gtttcgggct atgcggcatt
 60
 ccagaaaatc tgattcaaga gatcaaacga cgccagactt gtgatttgac catagtgtca
 120
 aataactgtg gtgtagatgg ttttggttta ggggttttgc tagaagataa gcaagtacgc
 180
 aaaatggtgt cttcttatgt gggtgaaaat gcaactgttg agaagcaatt attacaaggt
 240
 gagttggaag tcgagctcac tctcaaggc actcttgccg aaaaactacg cgctggcggc
 300
 gcgggaattc ctgccttttt cacagcaacg ggtgtaggta cacctattgg tgagggtaaa
 360
 gacacgcgt
 369

<210> 514
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 514
 Xaa Cys Arg Leu Glu Asp Gly Met Thr Val Leu Ala Gly Gly Phe Gly

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      1             5             10             15
Leu Cys Gly Ile Pro Glu Asn Leu Ile Gln Glu Ile Lys Arg Arg Gln
      20             25             30
Thr Cys Asp Leu Thr Ile Val Ser Asn Asn Cys Gly Val Asp Gly Phe
      35             40             45
Gly Leu Gly Val Leu Leu Glu Asp Lys Gln Val Arg Lys Met Val Ser
      50             55             60
Ser Tyr Val Gly Glu Asn Ala Leu Phe Glu Lys Gln Leu Leu Gln Gly
65             70             75             80
Glu Leu Glu Val Glu Leu Thr Pro Gln Gly Thr Leu Ala Glu Lys Leu
      85             90             95
Arg Ala Gly Gly Ala Gly Ile Pro Ala Phe Phe Thr Ala Thr Gly Val
      100            105            110
Gly Thr Pro Ile Gly Glu Gly Lys Asp Thr Arg
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<210> 515

<211> 387

<212> DNA

<213> Homo sapiens

<400> 515

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240
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387

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<210> 516

<211> 129

<212> PRT

<213> Homo sapiens

<400> 516

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Ala Trp Asp Glu Lys Ala Ala Gly Asn Cys Ala Ile Asp Tyr Gly Phe
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His Gln Ile Leu Ser Asp Val Gln Asp Ser Ser Leu Thr Ala Met Asp
      20             25             30
Glu Leu Ile Thr Glu Gly Val Thr Ser Phe Lys Leu Phe Val Ala Tyr
      35             40             45
Lys Gly Val Phe Leu Ser Asp Asp Gly Gln Ile Leu Arg Ala Phe Gln
      50             55             60
Lys Gly Ala Asp Asn Gly Ala Met Met Met Met His Ala Glu Asn Gly
65             70             75             80
Ala Ile Ile Asp Val Leu Val Gln Gln Ala Leu Glu Ala Gly Lys Thr

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```

      85              90              95
Thr Pro Tyr Tyr His Gly Ile Ser Arg Pro Trp Gln Ala Glu Glu Glu
      100              105              110
Ala Thr His Arg Ala Ile Met Ile Ala Asp Leu Thr Gly Ala Pro Leu
      115              120              125
Tyr

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<210> 517
 <211> 377
 <212> DNA
 <213> Homo sapiens

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120
attcgcgagt tccgggggag ctggggactg agctgcgggc ctcttgggct ggggctcttc
180
tccgaggttg gaggcagctt tagaaacttg agacccttag ctggagaggg cagaaggggt
240
ccctgagctt cccaggaga aggggggcca atttgagct tgcttttcac ctgagatgag
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360
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377

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<210> 518
 <211> 118
 <212> PRT
 <213> Homo sapiens

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<400> 518
Met Phe Met Gly Ala Gly Asp Ala Pro Leu Gly Ser Arg Pro Gly His
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Pro His Ser Ser Ser Gln Val Lys Ser Lys Leu Gln Ile Gly Pro Pro
      20      25      30
Ser Pro Gly Glu Ala Gln Gly Pro Leu Leu Pro Ser Pro Ala Arg Gly
      35      40      45
Leu Lys Phe Leu Lys Leu Pro Pro Thr Ser Glu Lys Ser Pro Ser Pro
      50      55      60
Gly Gly Pro Gln Leu Ser Pro Gln Leu Pro Arg Asn Ser Arg Ile Pro
      65      70      75      80
Cys Arg Asn Ser Gly Ser Asp Gly Ser Pro Ser Pro Leu Leu Ala Arg
      85      90      95
Arg Gly Leu Gly Gly Glu Leu Ser Pro Glu Gly Ala Gln Gly Leu
      100      105      110
Pro Thr Ser Pro Ser Arg
      115

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<210> 519
 <211> 311

<212> DNA

<213> Homo sapiens

<400> 519

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 120
 aagaaattga taatttttcta ggaaaacatg acttaccaaaa attaactcta gaaaagaatc
 180
 gatacacatc agtaacaaca gaagttgaga aagtagttaa catattgcca aacctggaat
 240
 tcatgattga attctttgag atctactgtg agtacatact ctgcctctgt tcagctgttc
 300
 cagaacttaa g
 311

<210> 520

<211> 92

<212> PRT

<213> Homo sapiens

<400> 520

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Thr	Phe	Ser	Ala	Thr	Leu	Lys	Asn	Val	Arg	Ile	Ser	Lys	Glu	Ile	Asp
			20					25					30		
Asn	Phe	Leu	Gly	Lys	His	Asp	Leu	Pro	Lys	Leu	Thr	Leu	Glu	Lys	Asn
		35					40					45			
Arg	Tyr	Thr	Ser	Val	Thr	Thr	Glu	Val	Glu	Lys	Val	Val	Asn	Ile	Leu
	50					55					60				
Pro	Asn	Leu	Glu	Phe	Met	Ile	Glu	Phe	Phe	Glu	Ile	Tyr	Cys	Glu	Tyr
65				70					75					80	
Ile	Leu	Cys	Leu	Cys	Ser	Ala	Val	Pro	Glu	Leu	Lys				
			85						90						

<210> 521

<211> 352

<212> DNA

<213> Homo sapiens

<400> 521

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 120
 accggccctg aggtggaaga agaagtaatt cgcgcgctca tgctgctgcg cctatccacc
 180
 ctgtgtaccg gccgtaccgg cgtgcgcccc gtggtggtag aaacttatgc caaggcgctc
 240
 aacgcgggca tcgtgccggg ggtgcgcgaa tacgggtcgc tgggctgctc cggcgacttg
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 352

<210> 522
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 522
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 20 25 30
 Leu Val Arg Ser His Ala Ala Gly Thr Gly Pro Glu Val Glu Glu Glu
 35 40 45
 Val Ile Arg Ala Leu Met Leu Leu Arg Leu Ser Thr Leu Cys Thr Gly
 50 55 60
 Arg Thr Gly Val Arg Pro Val Val Val Glu Thr Tyr Ala Lys Ala Leu
 65 70 75 80
 Asn Ala Gly Ile Val Pro Gly Val Arg Glu Tyr Gly Ser Leu Gly Cys
 85 90 95
 Ser Gly Asp Leu Ala Pro Leu Ala His Cys Ala Leu Ala Leu Leu Gly
 100 105 110
 Glu Gly Glu Val Arg
 115

<210> 523
 <211> 693
 <212> DNA
 <213> Homo sapiens

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 120
 aagctcctgg ttgagaaggc cctgaagctg ggtggcatca atgtccagcc tctgctgagc
 180
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 240
 gttgaaatgg ctgctcaggt gcctgtcact gtctggcatt ttcaggaaga ttcggagcaa
 300
 gaactccgct gattttctcc gtgtctgtgc aaccacaaca tagttcccag ggctcagatg
 360
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 600
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<210> 524
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 524
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 20 25 30
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 35 40 45
 Phe Pro Leu Asp Phe Gln Val Ile Leu Ala Gly Ser Gln Arg Phe Arg
 50 55 60
 Glu Lys Phe Pro Pro Val Phe Phe Ser Ser Phe Arg Asn Thr Val Gln
 65 70 75 80
 Ser Ser Asn Asn Lys Phe Arg Arg Asn Phe Thr Met Thr Tyr His Leu
 85 90 95
 Ser Pro Gly Asn Tyr Val Val Val Ala Gln Thr Arg Arg Lys Ser Ala
 100 105 110
 Glu Phe Leu Leu Arg Ile Phe Leu Lys Met Pro Asp Ser Asp Arg His
 115 120 125
 Leu Ser Ser His Phe Asn Leu Arg Met Lys Gly Ser Pro Ser Glu His
 130 135 140
 Gly Ser Gln Gln Ser Ile Phe Asn Arg Tyr Ala Gln Gln Arg Leu Asp
 145 150 155 160
 Ile Asp Ala Thr Gln Leu Gln Gly Leu Leu Asn Gln Glu Leu Leu Thr
 165 170 175
 Gly Pro Pro Gly Asp Met Phe Ser Leu Asp Gly Ala Ala Ala Trp Trp
 180 185 190
 Leu

<210> 525
 <211> 1101
 <212> DNA
 <213> Homo sapiens

<400> 525
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 120
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 180
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 300
 cagtttcagt tcgccgatgg gaaacccgga gaccaaatac ttgattggca gtatggagtt
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 420

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 720
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 780
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<210> 526

<211> 290

<212> PRT

<213> Homo sapiens

<400> 526

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Leu	Cys	His	Phe	Thr	Asp	Gln	Phe	Gln	Phe	Ala	Asp	Gly	Lys	Pro	
			20			25						30			
Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	Ala	Phe	Pro
			35			40						45			
His	Thr	Glu	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	Tyr	Ser	His	Arg
			50			55					60				
Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	Asp	Thr	Asn	Arg	Ala
65				70					75					80	
Ser	Val	Gly	Gln	Asp	Ser	Leu	Glu	Pro	Arg	Ser	Phe	Thr	Asp	Leu	Leu
			85			90							95		
Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	Gln	Ile	Glu	Glu	Asp	Thr	Asp
			100			105							110		
His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	Tyr	Gly	Pro	Ser	Asp	Ser	Ala	Ser
			115			120						125			
Arg	Asp	Leu	Trp	Val	Asn	Ile	Asp	Gln	Met	Glu	Lys	Asp	Lys	Val	Lys
			130			135					140				
Ile	His	Gly	Ile	Leu	Ser	Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val	Asn
145				150					155					160	
Leu	Ser	Phe	Asp	Phe	Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile	Thr
			165					170						175	
Val	Ala	Thr	Gly	Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg	Met

180							185					190				
Leu	Thr	Ala	Thr	Gln	Tyr	Ile	Ala	Pro	Leu	Met	Ala	Asn	Phe	Asp	Pro	
195							200					205				
Ser	Val	Ser	Arg	Asn	Ser	Thr	Val	Arg	Tyr	Phe	Asp	Asn	Gly	Thr	Ala	
210							215					220				
Leu	Val	Val	Gln	Trp	Asp	His	Val	His	Leu	Gln	Asp	Asn	Tyr	Asn	Leu	
225							230					235				
Gly	Ser	Phe	Thr	Phe	Gln	Ala	Thr	Leu	Leu	Met	Asp	Gly	Arg	Ile	Ile	
245							250					255				
Phe	Gly	Tyr	Lys	Glu	Ile	Pro	Val	Leu	Val	Thr	Gln	Ile	Ser	Ser	Thr	
260							265					270				
Asn	His	Pro	Val	Lys	Val	Gly	Leu	Ser	Asp	Ala	Phe	Val	Val	Val	His	
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<210> 527
<211> 5343
<212> DNA
<213> Homo sapiens
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840
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900
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960

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 4020
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 4200

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<210> 528

<211> 886

<212> PRT

<213> Homo sapiens

<400> 528

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		20					25					30			
Leu	Glu	Ala	Cys	Asp	Glu	Ser	Pro	Ala	Ser	Arg	Glu	Leu	Asp	Ile	Pro
	35					40					45				
Leu	Pro	Glu	Asp	Ser	Glu	Thr	Ala	Tyr	Asp	Trp	Glu	Tyr	Ala	Gly	Phe

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Thr Pro Cys Thr Ala	Thr Cys Leu Gly Gly His	Gln Glu Ala Ile Ala
65	70	75
Val Cys Leu His Ile	Gln Thr Gln Gln Thr Val	Asn Asp Ser Leu Cys
85	90	95
Asp Met Val His Arg	Pro Pro Ala Met Ser Gln Ala Cys	Asn Thr Glu
100	105	110
Pro Cys Pro Pro Arg	Trp His Val Gly Ser Trp Gly	Pro Cys Ser Ala
115	120	125
Thr Cys Gly Val Gly	Ile Gln Thr Arg Asp Val Tyr Cys	Leu His Pro
130	135	140
Gly Glu Thr Pro Ala	Pro Pro Glu Glu Cys Arg Asp	Glu Lys Pro His
145	150	155
Ala Leu Gln Ala Cys	Asn Gln Phe Asp Cys Pro Pro	Gly Trp His Ile
165	170	175
Glu Glu Trp Gln Gln	Cys Ser Arg Thr Cys Gly Gly Gly	Thr Gln Asn
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Arg Arg Val Thr Cys	Arg Gln Leu Thr Asp Gly Ser	Phe Leu Asn
195	200	205
Leu Ser Asp Glu Leu	Cys Gln Gly Pro Lys Ala Ser	Ser His Lys Ser
210	215	220
Cys Ala Arg Thr Asp	Cys Pro Pro His Leu Ala Val	Gly Asp Trp Ser
225	230	235
Lys Cys Ser Val Ser	Cys Gly Val Gly Ile Gln Arg	Arg Lys Gln Val
245	250	255
Cys Gln Arg Leu Ala	Ala Lys Gly Arg Arg Ile Pro	Leu Ser Glu Met
260	265	270
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275	280	285
Pro Glu Cys Ser Lys	Ile Lys Ser Glu Met Lys Thr	Lys Leu Gly Glu
290	295	300
Gln Gly Pro Gln Ile	Leu Ser Val Gln Arg Val Tyr	Ile Gln Thr Arg
305	310	315
Glu Glu Lys Arg Ile	Asn Leu Thr Ile Gly Ser Arg	Ala Tyr Leu Leu
325	330	335
Pro Asn Thr Ser Val	Ile Ile Lys Cys Pro Val Arg	Arg Phe Gln Lys
340	345	350
Ser Leu Ile Gln Trp	Glu Lys Asp Gly Arg Cys Leu	Gln Asn Ser Lys
355	360	365
Arg Leu Gly Ile Thr	Lys Ser Gly Ser Leu Lys Ile	His Gly Leu Ala
370	375	380
Ala Pro Asp Ile Gly	Val Tyr Arg Cys Ile Ala Gly	Ser Ala Gln Glu
385	390	395
Thr Val Val Leu Lys	Leu Ile Gly Thr Asp Asn Arg	Leu Ile Ala Arg
405	410	415
Pro Ala Leu Arg Glu	Pro Met Arg Glu Tyr Pro Gly	Met Asp His Ser
420	425	430
Glu Ala Asn Ser Leu	Gly Val Thr Trp His Lys Met	Arg Gln Met Trp
435	440	445
Asn Asn Lys Asn Asp	Leu Tyr Leu Asp Asp Asp	His Ile Ser Asn Gln
450	455	460
Pro Phe Leu Arg Ala	Leu Leu Gly His Cys Ser Asn	Ser Ala Gly Ser
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<210> 529
<211> 4566

<212> DNA

<213> Homo sapiens

<400> 529

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240
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<210> 530

<211> 802

<212> PRT

<213> Homo sapiens

<400> 530

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          20          25          30
Glu Leu Lys Arg Ala Gly Pro Arg Arg Arg Ala Ser Pro Glu Gly Cys
          35          40          45
Arg Ser Gly Gln Ala Ala Ala Ser Gln Ala Gly Gly Ala Arg Gly Asp
          50          55          60
Ala Arg Gly Ala Gln Leu Trp Pro Pro Gly Ser Asp Pro Asp Gly Gly
65          70          75          80
Pro Arg Asp Arg Asn Phe Leu Phe Val Gly Val Met Thr Ala Gln Lys
          85          90          95
Tyr Leu Gln Thr Arg Ala Val Ala Ala Tyr Arg Thr Trp Ser Lys Thr
          100          105          110
Ile Pro Gly Lys Val Gln Phe Phe Ser Ser Glu Gly Ser Asp Thr Ser
          115          120          125
Val Pro Ile Pro Val Val Pro Leu Arg Gly Val Asp Asp Ser Tyr Pro
          130          135          140
Pro Gln Lys Lys Ser Phe Met Met Leu Lys Tyr Met His Asp His Tyr
145          150          155          160
Leu Asp Lys Tyr Glu Trp Phe Met Arg Ala Asp Asp Asp Val Tyr Ile
          165          170          175
Lys Gly Asp Arg Leu Glu Asn Phe Leu Arg Ser Leu Asn Ser Ser Glu
          180          185          190
Pro Leu Phe Leu Gly Gln Thr Gly Leu Gly Thr Thr Glu Glu Met Gly
          195          200          205
Lys Leu Ala Leu Glu Pro Gly Glu Asn Phe Cys Met Gly Gly Pro Gly
          210          215          220
Val Ile Met Ser Arg Glu Val Leu Arg Arg Met Val Pro His Ile Gly
225          230          235          240
Lys Cys Leu Arg Glu Met Tyr Thr Thr His Glu Asp Val Glu Val Gly
          245          250          255
Arg Cys Val Arg Arg Phe Ala Gly Val Gln Cys Val Trp Ser Tyr Glu
          260          265          270
Met Gln Gln Leu Phe Tyr Glu Asn Tyr Glu Gln Asn Lys Lys Gly Tyr
          275          280          285
Ile Arg Asp Leu His Asn Ser Lys Ile His Gln Ala Ile Thr Leu His
          290          295          300
Pro Asn Lys Asn Pro Pro Tyr Gln Tyr Arg Leu His Ser Tyr Met Leu
305          310          315          320
Ser Arg Lys Ile Ser Glu Leu Arg His Arg Thr Ile Gln Leu His Arg
          325          330          335
Glu Ile Val Leu Met Ser Lys Tyr Ser Asn Thr Glu Ile His Lys Glu
          340          345          350
Asp Leu Gln Leu Gly Ile Pro Pro Ser Phe Met Arg Phe Gln Pro Arg
          355          360          365
Gln Arg Glu Glu Ile Leu Glu Trp Glu Phe Leu Thr Gly Lys Tyr Leu
          370          375          380
Tyr Ser Ala Val Asp Gly Gln Pro Pro Arg Arg Gly Met Asp Ser Ala
385          390          395          400
Gln Arg Glu Ala Leu Asp Asp Ile Val Met Gln Val Met Glu Met Ile

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                405                410                415
Asn Ala Asn Ala Lys Thr Arg Gly Arg Ile Ile Asp Phe Lys Glu Ile
                420                425                430
Gln Tyr Gly Tyr Arg Arg Val Asn Pro Met Tyr Gly Ala Glu Tyr Ile
                435                440                445
Leu Asp Leu Leu Leu Tyr Lys Lys His Lys Gly Lys Lys Met Thr
                450                455                460
Val Pro Val Arg Arg His Ala Tyr Leu Gln Gln Thr Phe Ser Lys Ile
465                470                475                480
Gln Phe Val Glu His Glu Glu Leu Asp Ala Gln Glu Leu Ala Lys Arg
                485                490                495
Ile Asn Gln Glu Ser Gly Ser Leu Ser Phe Leu Ser Asn Ser Leu Lys
                500                505                510
Lys Leu Val Pro Phe Gln Leu Pro Gly Ser Lys Ser Glu His Lys Glu
                515                520                525
Pro Lys Asp Lys Lys Ile Asn Ile Leu Ile Pro Leu Ser Gly Arg Phe
530                535                540
Asp Met Phe Val Arg Phe Met Gly Asn Phe Glu Lys Thr Cys Leu Ile
545                550                555                560
Pro Asn Gln Asn Val Lys Leu Val Val Leu Leu Phe Asn Ser Asp Ser
                565                570                575
Asn Pro Asp Lys Ala Lys Gln Val Glu Leu Met Thr Asp Tyr Arg Ile
                580                585                590
Lys Tyr Pro Lys Ala Asp Met Gln Ile Leu Pro Val Ser Gly Glu Phe
595                600                605
Ser Arg Ala Leu Ala Leu Glu Val Gly Ser Ser Gln Phe Asn Asn Glu
610                615                620
Ser Leu Leu Phe Phe Cys Asp Val Asp Leu Val Phe Thr Thr Glu Phe
625                630                635                640
Leu Gln Arg Cys Arg Ala Asn Thr Val Leu Gly Gln Gln Ile Tyr Phe
                645                650                655
Pro Ile Ile Phe Ser Gln Tyr Asp Pro Lys Ile Val Tyr Ser Gly Lys
660                665                670
Val Pro Ser Asp Asn His Phe Ala Phe Thr Gln Lys Thr Gly Phe Trp
675                680                685
Arg Asn Tyr Gly Phe Gly Ile Thr Cys Ile Tyr Lys Gly Asp Leu Val
690                695                700
Arg Val Gly Gly Phe Asp Val Ser Ile Gln Gly Trp Gly Leu Glu Asp
705                710                715                720
Val Asp Leu Phe Asn Lys Val Val Gln Ala Gly Leu Lys Thr Phe Arg
                725                730                735
Ser Gln Glu Val Gly Val Val His Val His His Pro Val Phe Cys Asp
740                745                750
Pro Asn Leu Asp Pro Lys Gln Tyr Lys Met Cys Leu Gly Ser Lys Ala
755                760                765
Ser Thr Tyr Gly Ser Thr Gln Gln Leu Ala Glu Met Trp Leu Glu Lys
770                775                780
Asn Asp Pro Ser Tyr Ser Lys Ser Ser Asn Asn Asn Gly Ser Val Arg
785                790                795                800
Thr Ala

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<210> 531

<211> 321

<212> DNA

<213> Homo sapiens

<400> 531

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120
aggaagaagc gtgaaacgct gtaggaccag cgtttcgaac gcccccgagg tgaaccctcg
180
ggggcgctctg aatcaggcca gttgggcctg ggacgacagc gggtgcagcg gcagcaatgg
240
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<210> 532

<211> 96

<212> PRT

<213> Homo sapiens

<400> 532

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Met Gly Gly Phe Leu Pro Gln Gln Lys Ala Arg Gln Tyr Val Ser Asn
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Lys Gly Leu Leu Phe Arg Asn Asn Lys Gly Leu Glu Leu Arg Gly Arg
      20           25           30
Ser Val Lys Arg Cys Arg Thr Ser Val Ser Asn Ala Pro Glu Val Asn
      35           40           45
Pro Arg Gly Arg Leu Asn Gln Ala Ser Trp Ala Trp Asp Asp Ser Gly
      50           55           60
Cys Ser Gly Ser Asn Gly Ala Cys Gly Ser Ala Leu Ile Asp Ser Arg
65           70           75           80
Gln Ala Pro Ser His Ser Ala Trp Pro Ser Phe His Thr Cys Trp Cys
      85           90           95

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<210> 533

<211> 335

<212> DNA

<213> Homo sapiens

<400> 533

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120
gagacgtggg cgagtcaggt ccggcatttc attagccttt tacacccaaa agtcaccctc
180
accaacattg acaacgtcct caacaaagat cacctgcgtt ggctacactt tcttttggag
240
ggtcgcctgg agccaaacgt gcgcctgatt gtccaggggt actgttcgcc tggcaagctg
300
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335

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<210> 534
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 534
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 Glu Thr Trp Ser Ser Gln Val Arg His Phe Ile Ser Leu Leu His Pro
 35 40 45
 Lys Val Thr Leu Thr Asn Ile Asp Asn Val Leu Asn Lys Asp His Leu
 50 55 60
 Arg Trp Leu His Phe Leu Leu Glu Gly Arg Leu Glu Pro Asn Val Arg
 65 70 75 80
 Leu Ile Val Gln Gly Tyr Cys Ser Pro Gly Lys Leu Tyr Arg Lys Leu
 85 90 95
 Glu Glu Leu Tyr Ala Pro Ser
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<210> 535
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 535
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 300
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<210> 536
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 536
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 Val Glu Leu Arg Gly Ala Asp Thr Gly Ser His Gln Val Gly Gly Val
 20 25 30
 Ser Ser Ala Gly Gly Leu Ala Leu Trp Ser Ala Leu Ala Ile Ser Leu

```

      35              40              45
Val Pro Ala Leu Trp Val Tyr Pro Val Ala Val Ala Val Gly Ile Leu
      50              55              60
Met Thr Arg Pro Arg Arg Leu Leu Leu Gly Ser Ile Val Val Leu Gly
65      70              75              80
Pro Leu Leu Val Ile Ser Pro Trp Ile Pro Arg Leu Ile Thr Glu Pro
      85              90              95
Gly Arg Met Ala Thr Gly Ala Glu Pro Val Leu Ser Pro Ala Val Glu
      100             105             110
Thr Arg

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<210> 537
 <211> 404
 <212> DNA
 <213> Homo sapiens

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<400> 537
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120
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240
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caagacagcc gccacgtgcc gctggaccgc atcgaagcgg gcctgagcgt agacctgagc
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404

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<210> 538
 <211> 118
 <212> PRT
 <213> Homo sapiens

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<400> 538
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      20      25      30
Ser Val Tyr Ser Gln Lys Ser Gln Leu Ala Leu Gly Ser Met Arg Tyr
      35      40      45
Asp Ile Glu Asp Thr Gly Gly Ile Asp Arg Leu Phe Lys Leu Ile Glu
      50      55      60
Gln Arg Ala Gly His Trp Leu Ala Met Glu Val Glu Glu Thr Lys Ile
65      70      75      80
Gln Leu Thr His Gln Asp Ser Arg His Val Pro Leu Asp Arg Ile Glu
      85      90      95
Ala Gly Leu Ser Val Asp Leu Ser Arg Ala Leu Phe Glu Ser Ser Ile
      100     105     110
Asp Asn Leu Leu Glu Arg

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115

<210> 539
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 539
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 ctggaccgcc cattggaagg ggactcttct ctagagctgc ttacatttga taatgaggaa
 360
 gctcaagctg tgagtatttt aaaaccagac agccaaactt tgggtagtta tgttgtaaac
 420
 tacattatat aagaggccac atattgaatt cacgaatggt gagttttttg ggggtttcta
 480
 agatttaaaa tttgattatt gatgtttaat aaatatttgc ctcatgaatg ttaa
 534

<210> 540
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 540
 Xaa Arg Val Lys Lys Lys Lys Met Lys Glu Ser Glu Ala Asp Ser Glu
 1 5 10 15
 Val Lys His Gln Pro Ile Phe Ile Lys Glu Arg Leu Lys Leu Phe Glu
 20 25 30
 Ile Leu Lys Lys Asp His Gln Leu Leu Leu Ala Ile Tyr Gly Lys Lys
 35 40 45
 Gly Asp Thr Ser Asn Ile Ile Thr Val Arg Val Ala Asp Gly Gln Thr
 50 55 60
 Val Gln Gly Glu Val Trp Lys Thr Thr Pro Tyr Gln Val Ala Ala Glu
 65 70 75 80
 Ile Ser Gln Glu Leu Ala Glu Ser Thr Val Ile Ala Lys Val Asn Gly
 85 90 95
 Glu Leu Trp Asp Leu Asp Arg Pro Leu Glu Gly Asp Ser Ser Leu Glu
 100 105 110
 Leu Leu Thr Phe Asp Asn Glu Glu Ala Gln Ala Val Ser Ile Leu Lys
 115 120 125
 Pro Asp Ser Gln Thr Leu Gly Ser Tyr Val Val Asn Tyr Ile Ile
 130 135 140

<210> 541
 <211> 551

<212> DNA

<213> Homo sapiens

<400> 541

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ggtagccgagc tgcgcgtgtg gtatgcccgc ttctatgcc aagaatgga caagcccatg
60
ctgaagcagg ccggctctgg cgtccacgct gcaggcacc cagaaaacag cgcctccgtg
120
gagtcggagc ccagccagtg ggcgtgtaaa gtgtgttctg ccaccttcct ggagctgcag
180
ctcctcaatg gtaaggagga cgtgtgggga gcccagttg taaaactcct gtgtcgattt
240
ctctctgact tacgctgtca cctgtctgcg gctgtcgggg gtgtcccaga ctttgtctctg
300
tctgccccat tgccccacaa tgtagtcgcc agaaccaagg ctttctcagg gtttaaagct
360
tctgggcagt cccgcttccc acccccagacc cctgcaggcc tcactcctca ctcctcctgg
420
ttgggaagtt gcatttcagc tgggcgcctt gactctggag cactggcagg ggccaggggc
480
caggagccag ccgtggcatg tgttgtgcac tcttgccctt gttgtctcta cttgacagcc
540
ccctcacgcg t
551

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<210> 542

<211> 168

<212> PRT

<213> Homo sapiens

<400> 542

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Met Asp Lys Pro Met Leu Lys Gln Ala Gly Ser Gly Val His Ala Ala
1      5      10      15
Gly Thr Pro Glu Asn Ser Ala Pro Val Glu Ser Glu Pro Ser Gln Trp
20     25     30
Ala Cys Lys Val Cys Ser Ala Thr Phe Leu Glu Leu Gln Leu Leu Asn
35     40     45
Gly Lys Glu Asp Val Trp Gly Ala Pro Val Val Lys Leu Leu Cys Arg
50     55     60
Phe Leu Ser Asp Leu Arg Cys His Leu Ser Ala Ala Val Gly Gly Val
65     70     75     80
Pro Asp Phe Val Leu Ser Ala Pro Leu Pro His Asn Val Val Ala Arg
85     90     95
Thr Lys Ala Phe Ser Gly Phe Lys Ala Ser Gly Gln Ser Arg Phe Pro
100    105    110
Pro Pro Thr Pro Ala Gly Leu Thr Pro His Ser Ser Trp Leu Gly Ser
115    120    125
Cys Ile Ser Ala Gly Arg Leu Asp Ser Gly Ala Leu Ala Gly Ala Arg
130    135    140
Gly Gln Glu Pro Ala Val Ala Cys Val Val His Ser Cys Leu Cys Cys
145    150    155    160
Leu Tyr Leu Thr Ala Pro Ser Arg
165

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<210> 543
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 543
 nnaaagccgg acatgaatac ccgcattgct ggcaaaactg tcctgaccat cattctggcc
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 gggggcгааг gcagccgect ggccccgatg accgatcagg tggccaaacc agccgtgccg
 120
 tttatgggga cgtaccgect gattgacttt tcgctgtcca acattgtcca cagcggcttg
 180
 caggacgtct ggatcattga gcaaaacctg ccccatagct taaacgagca cctggctggg
 240
 gggcgctcct gggatctgga ccgcaccgc ggtggcctga aggtcatgcc gcccttttcc
 300
 ggccctgccg atgaggacgg tggtttttcc gaaggcaacg cacacgcgt
 349

<210> 544
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 544
 Xaa Lys Pro Asp Met Asn Thr Arg Ile Ala Gly Lys Thr Val Leu Thr
 1 5 10 15
 Ile Ile Leu Ala Gly Gly Lys Gly Ser Arg Leu Ala Pro Met Thr Asp
 20 25 30
 Gln Val Ala Lys Pro Ala Val Pro Phe Met Gly Thr Tyr Arg Leu Ile
 35 40 45
 Asp Phe Ser Leu Ser Asn Ile Val His Ser Gly Leu Gln Asp Val Trp
 50 55 60
 Ile Ile Glu Gln Asn Leu Pro His Ser Leu Asn Glu His Leu Ala Gly
 65 70 75 80
 Gly Arg Ser Trp Asp Leu Asp Arg Thr Arg Gly Gly Leu Lys Val Met
 85 90 95
 Pro Pro Phe Ser Gly Pro Ala Asp Glu Asp Gly Gly Phe Ser Glu Gly
 100 105 110
 Asn Ala His Ala
 115

<210> 545
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 545
 catgatgcaa aaacagacat gcttattttca aaatataaaa gtgaaaaaga tcgttttagca
 60
 caagaaattg ttgggtgtcat cacaggttct gcaatgccgg gtgggttcagc aaaccgtatc
 120
 ccaaataaag caggctcaaa tccagaagggt tctattgcaa cgcgttttat tgcagaaaca
 180

atgtataacg aactcaaaac agtggattta actattcaaa atgctggcgg tgtacgcgca
 240
 gatattttac cggggaatgt aacctttaac gatgcttata ctttcttacc ttctgggaat
 300
 acgttatata cctataaaat ggaaagttca ttagtgaaac aagtgcctga agatgcaatg
 360
 ctatttgctt tgggtcccc ccccccccc
 390

<210> 546
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 546
 His Asp Ala Lys Thr Asp Met Leu Ile Ser Lys Tyr Lys Ser Glu Lys
 1 5 10 15
 Asp Arg Leu Ala Gln Glu Ile Val Gly Val Ile Thr Gly Ser Ala Met
 20 25 30
 Pro Gly Gly Ser Ala Asn Arg Ile Pro Asn Lys Ala Gly Ser Asn Pro
 35 40 45
 Glu Gly Ser Ile Ala Thr Arg Phe Ile Ala Glu Thr Met Tyr Asn Glu
 50 55 60
 Leu Lys Thr Val Asp Leu Thr Ile Gln Asn Ala Gly Gly Val Arg Ala
 65 70 75 80
 Asp Ile Leu Pro Gly Asn Val Thr Phe Asn Asp Ala Tyr Thr Phe Leu
 85 90 95
 Pro Phe Gly Asn Thr Leu Tyr Thr Tyr Lys Met Glu Ser Ser Leu Val
 100 105 110
 Lys Gln Val Leu Glu Asp Ala Met Leu Phe Ala Leu Gly Pro Pro Pro
 115 120 125
 Pro Pro
 130

<210> 547
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 547
 aagcttggtt ttctgatttt tattcaaata tctatcatgg atgaagcatg cagtttcaga
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 atcagttcag tggtagacaac atatcaagat attctgcagt caatctcaat gtatgttcat
 120
 gaagcctcca acatattttg tgggatacca tctttgtcag gcattgtgct aggcactgtc
 180
 cctgcagtga ataagaaaga caggatttct gtatttatgg ggcttagtac caagttgttc
 240
 tcaaaccttc atgtttgtgt atacaaatca gctgaggcct tcaactaaact cnnnnnccnn
 300
 nnnccnn
 306

<210> 548

<211> 90
 <212> PRT
 <213> Homo sapiens

<400> 548
 Met Asp Glu Ala Cys Ser Phe Arg Ile Ser Ser Val Leu Thr Thr Tyr
 1 5 10 15
 Gln Asp Ile Leu Gln Ser Ile Ser Met Tyr Val His Glu Ala Ser Asn
 20 25 30
 Ile Phe Cys Gly Ile Pro Ser Leu Ser Gly Ile Val Leu Gly Thr Val
 35 40 45
 Pro Ala Val Asn Lys Lys Asp Arg Ile Ser Val Phe Met Gly Leu Ser
 50 55 60
 Thr Lys Leu Phe Ser Asn Phe His Val Cys Val Tyr Lys Ser Ala Glu
 65 70 75 80
 Ala Phe Thr Lys Leu Xaa Xaa Xaa Xaa Xaa
 85 90

<210> 549
 <211> 780
 <212> DNA
 <213> Homo sapiens

<400> 549
 nnacgcgtac ttccaacacc tatgctccag tatggaggac gggtaaagtc tcttgtaaat
 60
 gttttaatca tacacatatt gtctgtaagt atgaagagaa aggcataatca gaaatatttc
 120
 aattcagcga tttgaaatgt ttactttctg tttattgaaa atttttgttc tttttcacca
 180
 tgttattttt ttctcctcgt gtagaatcgg acagtagcaa caccgagcca tggagtatgg
 240
 gacatgcgag ggaaacaatt ccacacagga gttgaaatca aaatgtgggc tatcgcttgt
 300
 tttgccacac agaggcagtg cagagaagaa atattgaagg gtttcacaga ccagctgcgt
 360
 aagattttcta aggatgcagg gatgcccatc cagggccagc catgcttctg caaatatgca
 420
 cagggggcag acagcgtaga gcccatgttc cggcatctca agaacacata ttctggccta
 480
 cagcttatta tcgtcatcct gccggggaag acaccagtgt atgcggaagt gaaacgtgta
 540
 ggagacacac ttttgggtat ggctacacaa tgtgttcaag tcaagaatgt aataaaaaca
 600
 tctcctcaaa ctctgtcaaa cttgtgccta aagataaatg ttaaactcgg agggatcaat
 660
 aatattcttg tacctcatca aagaccttct gtgttccagc aaccagtgat ctttttggga
 720
 gccgatgtca ctcatccacc tgctgggtgat ggaaagaagc cttctattgc tgctgttgta
 780

<210> 550
 <211> 192
 <212> PRT

<213> Homo sapiens

<400> 550

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Asn Arg Thr Val Ala Thr Pro Ser His Gly Val Trp Asp Met Arg Gly
 1           5           10           15
Lys Gln Phe His Thr Gly Val Glu Ile Lys Met Trp Ala Ile Ala Cys
          20           25           30
Phe Ala Thr Gln Arg Gln Cys Arg Glu Glu Ile Leu Lys Gly Phe Thr
          35           40           45
Asp Gln Leu Arg Lys Ile Ser Lys Asp Ala Gly Met Pro Ile Gln Gly
 50           55           60
Gln Pro Cys Phe Cys Lys Tyr Ala Gln Gly Ala Asp Ser Val Glu Pro
 65           70           75           80
Met Phe Arg His Leu Lys Asn Thr Tyr Ser Gly Leu Gln Leu Ile Ile
          85           90           95
Val Ile Leu Pro Gly Lys Thr Pro Val Tyr Ala Glu Val Lys Arg Val
          100          105          110
Gly Asp Thr Leu Leu Gly Met Ala Thr Gln Cys Val Gln Val Lys Asn
          115          120          125
Val Ile Lys Thr Ser Pro Gln Thr Leu Ser Asn Leu Cys Leu Lys Ile
          130          135          140
Asn Val Lys Leu Gly Gly Ile Asn Asn Ile Leu Val Pro His Gln Arg
145           150           155           160
Pro Ser Val Phe Gln Gln Pro Val Ile Phe Leu Gly Ala Asp Val Thr
          165           170           175
His Pro Pro Ala Gly Asp Gly Lys Lys Pro Ser Ile Ala Ala Val Val
          180          185          190

```

<210> 551

<211> 291

<212> DNA

<213> Homo sapiens

<400> 551

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nnggatccgg attatggggc tattgctaac aggtcaacgg ccatcaagggt gctcggtgcc
 60
gtggcaccgc cagccccgga gcctactcgc gagccaccga cgaactccgc tccttccgag
120
gaaccgtcct cgtcgtcaat cgcaccgggc ccgccggccc cgacgactgc agtaccacg
180
actagttcgt cgtcggggccg ctgaccgatg cgcccatcgg cgggctcatc tggctggcgc
240
tagcgggggc ttcgatgtcc ccataccaca gcgtccgcta aattgccnc c
291

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<210> 552

<211> 67

<212> PRT

<213> Homo sapiens

<400> 552

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Xaa Asp Pro Asp Tyr Gly Ala Ile Ala Asn Arg Ser Thr Ala Ile Lys
 1           5           10           15
Val Leu Val Ala Val Ala Pro Pro Ala Pro Glu Pro Thr Arg Glu Pro

```

```

          20          25          30
Pro Thr Asn Ser Ala Pro Ser Glu Glu Pro Ser Ser Ser Ser Ile Ala
          35          40          45
Pro Val Pro Pro Ala Pro Thr Thr Ala Val Pro Thr Thr Ser Ser Ser
          50          55          60
Ser Gly Arg
65

```

<210> 553
 <211> 471
 <212> DNA
 <213> Homo sapiens

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<400> 553
ctagccgatg taggattagt aggttttccg agcgtgggta aatctacctt actctcaata
60
gtatctaaag ccaaaccgaa aattggtgca tatcatttca ctacaattaa acctaactta
120
ggtgttggtt ccacaaaaga tcaacgtagt tttgttatgg cagatttacc aggtttaatt
180
gaaggtgcat ctgatggcgt tggattagga catcaatttt taagacatgt agagagaaca
240
aaagttattg ttcacatgat tgatatgagc ggttctgaag gtagagaacc tattgaagat
300
tataaagtca ttaatcaaga attagctgcg tacgagcaac gtttagaaga tagacctcaa
360
atcgtagtag ctaacaagat ggatttacct gaatcacaag ataatttaaa cttgttttaa
420
gaagaaattg gcgaagatgt gccagttatt ccagtttcaa caataacgcg t
471

```

<210> 554
 <211> 157
 <212> PRT
 <213> Homo sapiens

```

<400> 554
Leu Ala Asp Val Gly Leu Val Gly Phe Pro Ser Val Gly Lys Ser Thr
1          5          10          15
Leu Leu Ser Ile Val Ser Lys Ala Lys Pro Lys Ile Gly Ala Tyr His
          20          25          30
Phe Thr Thr Ile Lys Pro Asn Leu Gly Val Val Ser Thr Lys Asp Gln
          35          40          45
Arg Ser Phe Val Met Ala Asp Leu Pro Gly Leu Ile Glu Gly Ala Ser
          50          55          60
Asp Gly Val Gly Leu Gly His Gln Phe Leu Arg His Val Glu Arg Thr
65          70          75          80
Lys Val Ile Val His Met Ile Asp Met Ser Gly Ser Glu Gly Arg Glu
          85          90          95
Pro Ile Glu Asp Tyr Lys Val Ile Asn Gln Glu Leu Ala Ala Tyr Glu
          100          105          110
Gln Arg Leu Glu Asp Arg Pro Gln Ile Val Val Ala Asn Lys Met Asp
          115          120          125
Leu Pro Glu Ser Gln Asp Asn Leu Asn Leu Phe Lys Glu Glu Ile Gly

```

130 135 140
 Glu Asp Val Pro Val Ile Pro Val Ser Thr Ile Thr Arg
 145 150 155

<210> 555
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 555
 tctagagatt gagaacaatt atggatacag aaatggttga ttccgtcaaa tatattcgag
 60
 attcgggaatc atgtgaggct cgcgtgctgg agatcttagc cagaaggccg tccatgatgg
 120
 tgcagatctt gcgtggcgac ggcttaatta acgaagacca gagattagtc agattatggc
 180
 ttaataaagt acctagaatt gttcgccctgc ttctccggct tagtgtgttc gtcgctgcgg
 240
 caataggtgc ccgtgcggta tgggcggcgg cttccggtaa tcccgatctt gttcacgcgt
 300

<210> 556
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 556
 Met Asp Thr Glu Met Val Asp Ser Val Lys Tyr Ile Arg Asp Ser Glu
 1 5 10 15
 Ser Cys Glu Ala Arg Val Leu Glu Ile Leu Ala Arg Arg Pro Ser Met
 20 25 30
 Met Val Gln Ile Leu Arg Gly Asp Gly Leu Ile Asn Glu Asp Gln Arg
 35 40 45
 Leu Val Arg Leu Trp Leu Asn Lys Val Pro Arg Ile Val Arg Leu Leu
 50 55 60
 Leu Arg Leu Ser Val Phe Val Ala Ala Ala Ile Gly Ala Arg Ala Val
 65 70 75 80
 Trp Ala Ala Ala Ser Gly Asn Pro Asp Leu Val His Ala
 85 90

<210> 557
 <211> 678
 <212> DNA
 <213> Homo sapiens

<400> 557
 atcttcccgg tttatgagga gaatgcgctg cgtgtcgagt ttttcggcga cgaaattgag
 60
 gccctcacga cgatgcaccc gctcaccggg gaggtcatca gcgaggacga gcaggtctac
 120
 gtgttcccgg ctaccacta tgtcgccggc ccggaacgta tggagcgggc catagcgtcc
 180
 atccagcagg agctcgagga gcgcctggcc gttctagagc gtgatgggaa actgttggag
 240

```

gccaacggt tacgtatgcg tactacctac gatatcgaga tgatgcagca ggctcgtgcc
300
tgtgctggca tcgaaaacta ttcgcggcac atcgacggac gcgtccccgg ctcagccccg
360
aactgtctgc ttgactactt tccggaagat tttgtgctcg tcattgatga atcccacgtg
420
accgtccccg agattggcgg gatgtatgag ggggacatga gccgcaagcg gacattggta
480
gaacatgggt tccgactgcc cagcgcgatg gacaaccgtc ctctcaaatt cgacgagttc
540
accagcggga tcggccagac tgtctacctg tccgccacgc ccggttcgta cgagaccgaa
600
cgagctcacg gcgtcgctga acaaatcatt cgtccgacag gtctgggtgga tccggagatt
660
atcgtcaagc ctacgcgt
678

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<210> 558

<211> 226

<212> PRT

<213> Homo sapiens

<400> 558

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Ile Phe Pro Val Tyr Glu Glu Asn Ala Leu Arg Val Glu Phe Phe Gly
 1           5           10           15
Asp Glu Ile Glu Ala Leu Thr Thr Met His Pro Leu Thr Gly Glu Val
      20           25           30
Ile Ser Glu Asp Glu Gln Val Tyr Val Phe Pro Ala Thr His Tyr Val
      35           40           45
Ala Gly Pro Glu Arg Met Glu Arg Ala Ile Ala Ser Ile Gln Gln Glu
      50           55           60
Leu Glu Glu Arg Leu Ala Val Leu Glu Arg Asp Gly Lys Leu Leu Glu
      65           70           75           80
Ala Gln Arg Leu Arg Met Arg Thr Thr Tyr Asp Ile Glu Met Met Gln
      85           90           95
Gln Val Gly Ala Cys Ala Gly Ile Glu Asn Tyr Ser Arg His Ile Asp
      100          105          110
Gly Arg Ala Pro Gly Ser Ala Pro Asn Cys Leu Leu Asp Tyr Phe Pro
      115          120          125
Glu Asp Phe Val Leu Val Ile Asp Glu Ser His Val Thr Val Pro Gln
      130          135          140
Ile Gly Gly Met Tyr Glu Gly Asp Met Ser Arg Lys Arg Thr Leu Val
      145          150          155          160
Glu His Gly Phe Arg Leu Pro Ser Ala Met Asp Asn Arg Pro Leu Lys
      165          170          175
Phe Asp Glu Phe Thr Gln Arg Ile Gly Gln Thr Val Tyr Leu Ser Ala
      180          185          190
Thr Pro Gly Ser Tyr Glu Thr Glu Arg Ala His Gly Val Val Glu Gln
      195          200          205
Ile Ile Arg Pro Thr Gly Leu Val Asp Pro Glu Ile Ile Val Lys Pro
      210          215          220
Thr Arg
225

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<210> 559
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 559
 ggatcctatg gagctcaagt tcaagaaaag aaactgtaaa catggaggtt ttgtgataaa
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 tggaaatgcag tcagagggaa ggaactgccn gcttaaagtg tcctatgctg cgctttccag
 120
 agcaatacag tacacagtgg agggcgctac catggagtct ctgggtgaaa gttaggatgg
 180
 tatggtggca ccagccaaac ttctcagggt tcataggcag acagcagctc tggagtggaa
 240
 ctaaagtgtg tccaggagct gaagccctta atcagctagg gctcacacag agtcaaggta
 300
 ggggtcaaaaa cattcagtct gggaccatat ctaga
 335

<210> 560
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 560
 Met Glu Cys Ser Gln Arg Glu Gly Thr Ala Xaa Leu Lys Cys Pro Met
 1 5 10 15
 Leu Arg Phe Pro Glu Gln Tyr Ser Thr Gln Trp Arg Ala Leu Pro Trp
 20 25 30
 Ser Leu Trp Val Lys Val Arg Met Val Trp Trp His Gln Pro Asn Phe
 35 40 45
 Ser Gly Phe Ile Gly Arg Gln Leu Trp Ser Gly Thr Lys Val Tyr
 50 55 60
 Pro Gly Ala Glu Ala Leu Asn Gln Leu Gly Leu Thr Gln Ser Gln Gly
 65 70 75 80
 Arg Val Lys Asn Ile Gln Ser Gly Thr Ile Ser Arg
 85 90

<210> 561
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 561
 ngcgcgcccc ctctccgat ggcggcggag atccagccca agcctctgac ccgcaagccg
 60
 atcctgctgc agcggatgga ggggtcccag gaggtggtga atatggccgt gatcgtgccc
 120
 aaagaggagg gcgtcatcag cgtctccgag gacaggacag ttcgtgtttg gttaaagaga
 180
 gacagtggac agtattggcc aagcgtatac catgcaatgc cttgagttta tattgtcaga
 240
 agattataac aagatgactc ctgtgaaaaa ctatcaagcg catcagagca gagtgcagat
 300

gacccctgttt gtcctggagc tggagtgggt gctgagcaca ggacaggaca agcaatttgc
 360
 ctggcactgc tctgagagtg ggcagcgctt gggagggttat cggaccagtg ctgtggcctc
 420
 aggcctgcaa tttgatgttg aaaccggca tgtgtttatc ggtgaccact caggcca
 477

<210> 562
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 562
 Xaa Ala Pro Pro Pro Pro Met Ala Ala Glu Ile Gln Pro Lys Pro Leu
 1 5 10 15
 Thr Arg Lys Pro Ile Leu Leu Gln Arg Met Glu Gly Ser Gln Glu Val
 20 25 30
 Val Asn Met Ala Val Ile Val Pro Lys Glu Glu Gly Val Ile Ser Val
 35 40 45
 Ser Glu Asp Arg Thr Val Arg Val Trp Leu Lys Arg Asp Ser Gly Gln
 50 55 60
 Tyr Trp Pro Ser Val Tyr His Ala Met Pro
 65 70

<210> 563
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 563
 ccattggcaga caggagctg agcggcctgc ggaccaggt gcaccagagc atggtgcccc
 60
 tgctcctaca cctgaaggac caatgcccaa ctgtcgccac gggcaatgcc caccacaaga
 120
 aaaggaaggg aaaaggcctc aaccttggcc agggctggaa cccacaggag gccagggtac
 180
 ggggcagacg gatggcagca gcactgcctg agagttgggg gagctccac ggggcagcaa
 240
 gtggcgggca gaggtcttg ccattctgcac tggtttctgt gaccacagtt ggctgcccg
 300
 ctccccact gcaccactga cgaagcgaga cctgcctca aaaaaaaaaa caaaaacaaa
 360
 aacaaaaaca aaactcaaac ttcacactgg agatctgtgc aat
 403

<210> 564
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 564
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser
 1 5 10 15
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Thr Val Ala


```

                20                25                30
Thr Gly Asn Ala His Pro Lys Lys Arg Lys Gly Lys Gly Leu Asn Leu
      35                40                45
Gly Gln Gly Trp Asn Pro Gln Glu Ala Arg Val Arg Gly Arg Arg Met
      50                55                60
Ala Ala Ala Leu Pro Glu Ser Trp Gly Ser Ser His Gly Ala Ala Ser
65                70                75                80
Gly Gly Gln Arg Val Trp Pro Ser Ala Leu Val Ser Val Thr Thr Val
      85                90                95
Gly Leu Pro Ala Pro Pro Leu His His
      100                105

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<210> 565
 <211> 311
 <212> DNA
 <213> Homo sapiens

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<400> 565
ncctctccat ggagcagccc catcttcaact cttcacctgg ggccaggcct tccacagcag
60
ccaccacca ggcaccacag agaggctgcg cggaggacac aggagagagg gagcccacgg
120
gcacgatctc caccggcttt ccagctccc tgggtcagcc ccacgggacc tctcctctc
180
tctccacat ctccaagcca gccttgcata tagtaagagc tgtgatcagg atggaaagag
240
gcttggggccg cacagacctg gacaatgtcc cagtgagggc tggaggtgct agaagggcac
300
aggaggcccc n
311

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<210> 566
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 566
Met Glu Gln Pro His Leu His Ser Ser Pro Gly Ala Arg Pro Ser Thr
1                5                10                15
Ala Ala Thr Thr Gln Arg Pro Gln Arg Gly Cys Ala Glu Asp Thr Gly
      20                25                30
Glu Arg Glu Pro Thr Gly Thr Ile Ser Thr Gly Phe Pro Ser Ser Leu
      35                40                45
Gly Gln Pro His Gly Thr Ser Pro Pro Leu Ser His Ile Ser Lys Pro
      50                55                60
Ala Leu His Ile Val Arg Ala Val Ile Arg Met Glu Arg Gly Leu Gly
65                70                75                80
Arg Thr Asp Leu Asp Asn Val Pro Val Arg Ala Gly Gly Ala Arg Arg
      85                90                95
Ala Gln Glu Ala Pro
      100

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<210> 567
 <211> 929

<212> DNA

<213> Homo sapiens

<400> 567

atcacatcgg tcgctgaacc ccgacgagcc tcaccttgct gaaatattca tccttgagat
 60
 cagcccacgt gccgtcgacc tctacctcgg tgagggtcgc gggcgggtac caacagccga
 120
 cctcgtcctc ggctccactc atggcggcaa gttccgctgc cagtccgggg atcgtcgggg
 180
 catgggcatg gatgagcagg ttatccacat cgtcgtcgat ttctccgatg cgcgcagca
 240
 cggatcagtg gccgcagtaa tagagggtc gcataaattc gaccggacaa tccagttgga
 300
 ggcagtcctc ggtctggcgg gtgcgtaggg catcggagac cagagcatgt ccaacattgc
 360
 gcagtcctaa acgcgtgccg acctcacggg cctgacggcg cccacgctcg gtgagcggac
 420
 gctcccgatc cccgcccga gcattgggatg cgggctgtgc atgtctcatg aggaacagag
 480
 tgtgcatgga tccatcggtg cacttcgcgg tcgccgcggt tctacgatgt tggcatgccg
 540
 ttgacggatt tgggcattga tgaggcgcgt acctaccgcc cgaacgtccc tgaacccgat
 600
 ggtttcgact ctttttgggc cgagaccctc gatgagtatt cggcggttcc ccaagatctg
 660
 acggcggtgc ctttcgataa ccgtcaggct ctgatagata cctgggattt gtcgtgggtg
 720
 gggatcaca actctcgggt gagcgggtga ttacatgcc cagccgctgt gaacggccca
 780
 ttcccccttg tcatcgagta cctcgggtac tcgagttcgc gtgggtgtgc gattggatca
 840
 gtcttcgctg ctgctggcta tgcacatata gtcgtcgatc cacgtgggtca ggggtggggc
 900
 caccacacct tgacggaaaa ctgtccgga
 929

<210> 568

<211> 71

<212> PRT

<213> Homo sapiens

<400> 568

Met Pro Leu Thr Asp Leu Gly Ile Asp Glu Ala Arg Thr Tyr Arg Pro
 1 5 10 15
 Asn Val Pro Glu Pro Asp Gly Phe Asp Ser Phe Trp Ala Glu Thr Leu
 20 25 30
 Asp Glu Tyr Ser Gly Val Pro Gln Asp Leu Thr Ala Val Pro Phe Asp
 35 40 45
 Asn Arg Gln Ala Leu Ile Asp Thr Trp Asp Leu Ser Trp Val Gly Tyr
 50 55 60
 His Asn Ser Arg Val Ser Gly
 65 70

<210> 569
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 569
 ncgcaaactt caacggtgcc atctgccata ttccagggat gccagatttg gatggaaaat
 60
 accatatcac tctcgattca gaattcgtac ttgatttagt ggcctttaac aaaacgctac
 120
 ctgtcgatta cttaatgggc gaaggaacgg aacttggtga ttcaaactg gaagaactac
 180
 ctgaatgccc atattatcca aaagatcaaa agccaatcgt gattgggaaa aacacaaaac
 240
 tcaaggaaca accaacagcc gttgctctct tctcggatgt tgataaacgg ccagagatta
 300
 aatcaaaaat cttagaccgc tatgataatg atattgaaat cgtacttgg ggcgggtactt
 360
 cccatgtcta n
 371

<210> 570
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 570
 Met Pro Asp Leu Asp Gly Lys Tyr His Ile Thr Leu Asp Ser Glu Phe
 1 5 10 15
 Val Leu Asp Leu Val Ala Phe Asn Lys Thr Leu Pro Val Asp Tyr Leu
 20 25 30
 Met Val Glu Gly Thr Glu Leu Val Tyr Ser Asn Met Glu Glu Leu Pro
 35 40 45
 Glu Cys Pro Tyr Tyr Pro Lys Asp Gln Lys Pro Ile Val Ile Gly Lys
 50 55 60
 Asn Thr Lys Leu Lys Glu Gln Pro Thr Ala Val Ala Leu Phe Ser Asp
 65 70 75 80
 Val Asp Lys Arg Pro Glu Ile Lys Ser Lys Ile Leu Asp Arg Tyr Asp
 85 90 95
 Asn Asp Ile Glu Ile Arg Thr Trp Gly Gly Thr Ser His Val Xaa
 100 105 110

<210> 571
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 571
 nacgcgtatc ttcgctgggc cacaccagac gtggcattaa acgacgtcac aagaacgaca
 60
 ccgggccttg acgggcccac gcacgaagag gccaagacac tgaccgagac tactgtttcc
 120
 gttccacact ccttcgccga cctcggcgct cgagaagata tctgccaggc gctggaaggg
 180

gtgggaattg tctccccgtt cccgatccag gccatgtcga tcccgattgc cgtcgagggc
 240
 acggatctta ttgggcaggc gcgtactggc actggcaaaa cactcgcctt cggcatcacc
 300
 atcttgacgc gcatcaccct gcccggtagc gaagggtggg aagaactcac caccaaaggc
 360
 aagcccccaa gcactcgtga tgtgcccta cccgggagct aggtcgg
 407

<210> 572

<211> 100

<212> PRT

<213> Homo sapiens

<400> 572

Leu	Thr	Glu	Thr	Thr	Val	Ser	Val	Pro	Thr	Ser	Phe	Ala	Asp	Leu	Gly
1				5					10					15	
Val	Arg	Glu	Asp	Ile	Cys	Gln	Ala	Leu	Glu	Gly	Val	Gly	Ile	Val	Ser
			20					25					30		
Pro	Phe	Pro	Ile	Gln	Ala	Met	Ser	Ile	Pro	Ile	Ala	Val	Glu	Gly	Thr
			35				40					45			
Asp	Leu	Ile	Gly	Gln	Ala	Arg	Thr	Gly	Thr	Gly	Lys	Thr	Leu	Ala	Phe
	50				55					60					
Gly	Ile	Thr	Ile	Leu	Gln	Arg	Ile	Thr	Leu	Pro	Gly	Asp	Glu	Gly	Trp
65					70				75					80	
Glu	Glu	Leu	Thr	Thr	Lys	Gly	Lys	Pro	Pro	Ser	Thr	Arg	Asp	Val	Pro
				85				90						95	
Leu	Pro	Gly	Ser												
			100												

<210> 573

<211> 393

<212> DNA

<213> Homo sapiens

<400> 573

acgcgtctac cgtaggatcc atgaccttcc gcaagaccga ccaccacaag aacgccattg
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 actacgaggt cgccggacta atgtggctcg ctgtgcccgc gccagatggg gccggcatcg
 120
 tcgaggtgct cgaccacggc aagggatggc tcaccgaacc cgaattgtcc actgggcacc
 180
 ccacccgcga ggcagccgag gactttggcc gccgactggc tcacacccac gcagccgggg
 240
 cctcacacct gggggctgca cctgacgggt ttgttcccga cgatgggtat atcggccgtg
 300
 ctcccctgcc actgccgtcc gaaccaatct cctcctgggg agagttttac gctcagtgcc
 360
 gcatcgaacc atatatggac agtctcgacg ctg
 393

<210> 574

<211> 124

<212> PRT

<213> Homo sapiens

<400> 574

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Met Thr Phe Arg Lys Thr Asp His His Lys Asn Ala Ile Asp Tyr Glu
 1           5           10           15
Val Ala Gly Leu Met Trp Leu Ala Ala Arg Pro Asp Gly Ala Gly
      20           25           30
Ile Val Glu Val Leu Asp His Gly Lys Gly Trp Leu Thr Glu Pro Glu
      35           40           45
Leu Ser Thr Gly His Pro Thr Arg Glu Ala Ala Glu Asp Phe Gly Arg
      50           55           60
Arg Leu Ala His Thr His Ala Ala Gly Ala Ser His Leu Gly Ala Ala
      65           70           75           80
Pro Asp Gly Phe Val Pro Asp Asp Gly Tyr Ile Gly Arg Ala Pro Leu
      85           90           95
Pro Leu Pro Ser Glu Pro Ile Ser Ser Trp Gly Glu Phe Tyr Ala Gln
      100          105          110
Cys Arg Ile Glu Pro Tyr Met Asp Ser Leu Asp Ala
      115          120

```

<210> 575

<211> 372

<212> DNA

<213> Homo sapiens

<400> 575

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nntatccatg cagacatggg accaggggtct ctgagggcag gaagcaaagt gggtgagggg
60
gatgggacaa gatgccctgg tgctaaggcc tctggagctg gagctgggta tagggatgat
120
accaggcacc ctgagtcact cgcacctcac aatggggccg cttctgggag ccagtgggct
180
tatggggctg gcaatgtgct gggttatgag gatggatcag aacttcagg gcctcagga
240
actgggggtca gaacagccta tggagaaagg tcaaggggccc ttgggcctag gagtacaggg
300
ccaggggggtg aggcaggctt tagagatggt tcaggaggcc tccaaggaat gggatcagca
360
gatggggccc gt
372

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<210> 576

<211> 124

<212> PRT

<213> Homo sapiens

<400> 576

```

Xaa Ile His Ala Asp Met Gly Pro Gly Ser Leu Arg Ala Gly Ser Lys
 1           5           10           15
Val Gly Glu Gly Asp Gly Thr Arg Cys Pro Gly Ala Lys Ala Ser Gly
      20           25           30
Ala Gly Ala Gly Tyr Arg Asp Asp Thr Arg His Pro Glu Ser Leu Ala
      35           40           45
Pro His Asn Gly Ala Ala Ser Gly Ser Gln Trp Ala Tyr Gly Ala Gly

```

```

      50              55              60
Asn Val Leu Gly Tyr Glu Asp Gly Ser Glu Leu Pro Gly Pro Gln Gly
65              70              75              80
Thr Gly Val Arg Thr Ala Tyr Gly Glu Arg Ser Arg Gly Leu Gly Pro
      85              90              95
Arg Ser Thr Gly Pro Gly Gly Glu Ala Gly Phe Arg Asp Gly Ser Gly
      100              105              110
Gly Leu Gln Gly Met Gly Ser Ala Asp Gly Pro Gly
      115              120

```

<210> 577

<211> 432

<212> DNA

<213> Homo sapiens

<400> 577

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nagcgcaatg tcatgatgtc ggatttgtca atgtcggatt tctcatccca gccatcaccc
60
ccgcagcgcc gggcgcggat gaccagcggc cagcgccgtg aacagctcat cagcgtggcc
120
cgtcgcctct tcgcagacaa tggcatggca gggacctccg tcgaggagat cgccgctacc
180
gcgggagtct ccaaaccogt catctacgag catttcgggt ccaaggatgg gctgtacgcc
240
gtcgtcgtag accgcgaggt acgccaccta caagattccc tcaacgcgcg catgaccgcg
300
ccaaagcaag gcccgaacg caccctggag tcagcggtag tggccctgct ggactacatc
360
gacgaccgtc cagacggttt tcggatcatc tcgcgagact cctcggtcgg ttcagccacc
420
ggttcgtacg cg
432

```

<210> 578

<211> 118

<212> PRT

<213> Homo sapiens

<400> 578

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Met Thr Ser Gly Gln Arg Arg Glu Gln Leu Ile Ser Val Ala Arg Arg
1              5              10              15
Leu Phe Ala Asp Asn Gly Met Ala Gly Thr Ser Val Glu Glu Ile Ala
      20              25              30
Ala Thr Ala Gly Val Ser Lys Pro Val Ile Tyr Glu His Phe Gly Ser
      35              40              45
Lys Asp Gly Leu Tyr Ala Val Val Val Asp Arg Glu Val Arg His Leu
      50              55              60
Gln Asp Ser Leu Asn Ala Ala Met Thr Arg Pro Lys Gln Gly Pro Lys
65              70              75              80
Arg Thr Leu Glu Ser Ala Val Leu Ala Leu Leu Asp Tyr Ile Asp Asp
      85              90              95
Arg Pro Asp Gly Phe Arg Ile Ile Ser Arg Asp Ser Ser Val Gly Ser
      100              105              110
Ala Thr Gly Ser Tyr Ala

```

115

<210> 579
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 579
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 60
 ctgctcccag ggatcaccac cttaccacagc gggccacctg ctcccccggt ccccgcgggc
 120
 cccggccctt ggctgcgagc acccctcttc agcctgaagc tgtccgacac agaggacgtc
 180
 tttctcgcc gcgcggggcc gctcgaggtc ccggccgaca gccgcgtgtt cgtgcaggcg
 240
 gccttggtccc gtccctcccc gcgctggggc ctggccctgc accgctgtct agtgacgccg
 300
 tcctcacgcc cggccccggg
 320

<210> 580
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 580
 Met Leu Gly Thr Val Leu Leu Leu Ala Leu Leu Pro Gly Ile Thr Thr
 1 5 10 15
 Leu Pro Ser Gly Pro Pro Ala Pro Pro Phe Pro Ala Ala Pro Gly Pro
 20 25 30
 Trp Leu Arg Arg Pro Leu Phe Ser Leu Lys Leu Ser Asp Thr Glu Asp
 35 40 45
 Val Phe Pro Arg Arg Ala Gly Pro Leu Glu Val Pro Ala Asp Ser Arg
 50 55 60
 Val Phe Val Gln Ala Ala Leu Ala Arg Pro Ser Pro Arg Trp Gly Leu
 65 70 75 80
 Ala Leu His Arg Cys Ser Val Thr Pro Ser Ser Arg Pro Ala Pro
 85 90 95

<210> 581
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 581
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 60
 caggtcggca tgggcttcaa gacgccagta cgcattgcaca gcgtcgaccc caagaccgcg
 120
 gaagcccgcg aggtgcattt ccgcccgtcg ctgttcaact atgccaagac caggtgggac
 180
 accaagcagc tgaccggcga cctgggtttc tccgggtttc agctgttcaa ggcgcgggaa
 240

ctggatcgcc atgacgtgct gtcgtttctc ggcgccagtt acttccgtgc ggtggacgca
 300
 acccgccagt acggcctctc cgcacgcggc ctggcgattg atacctacgc gaaaaaacgc
 360
 gaggaattcc ccgacttcac gcagttctgg ttcgaaaccc cgagcaagga cccacgcgt
 419

<210> 582

<211> 139

<212> PRT

<213> Homo sapiens

<400> 582

Xaa	Asp	Gly	Asn	His	Ser	Leu	Trp	Lys	Glu	Leu	Asn	Gly	Gln	Leu	Asp
1				5					10					15	
Val	Gln	Phe	Phe	His	Val	Gly	Met	Gly	Phe	Lys	Thr	Pro	Val	Arg	Met
			20					25					30		
His	Ser	Val	Asp	Pro	Lys	Thr	Arg	Glu	Ala	Arg	Glu	Val	His	Phe	Arg
			35				40					45			
Pro	Ser	Leu	Phe	Asn	Tyr	Ala	Lys	Thr	Thr	Val	Asp	Thr	Lys	Gln	Leu
	50					55					60				
Thr	Gly	Asp	Leu	Gly	Phe	Ser	Gly	Phe	Lys	Leu	Phe	Lys	Ala	Pro	Glu
65					70					75				80	
Leu	Asp	Arg	His	Asp	Val	Leu	Ser	Phe	Leu	Gly	Ala	Ser	Tyr	Phe	Arg
			85						90					95	
Ala	Val	Asp	Ala	Thr	Arg	Gln	Tyr	Gly	Leu	Ser	Ala	Arg	Gly	Leu	Ala
			100					105					110		
Ile	Asp	Thr	Tyr	Ala	Lys	Lys	Arg	Glu	Glu	Phe	Pro	Asp	Phe	Thr	Gln
		115				120						125			
Phe	Trp	Phe	Glu	Thr	Pro	Ser	Lys	Asp	Pro	Arg					
			130				135								

<210> 583

<211> 407

<212> DNA

<213> Homo sapiens

<400> 583

cttttgatca atgctgatgg cacgaagcta tcgaaaaggc cgggtgatgt ccgcgtagct
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 gattatatgg agcaggggatg ggagccggag acgctggtga acctagttgc cctcacgggc
 120
 tatagctatg cgaatttgga gcatgctgat catgatgtca agacgatgaa cgaactcatc
 180
 cgtgactttg agcttactcg tatctcccat acgcgagcca cactcccat ggacaagctt
 240
 gtgtttttga acaagcatca cttgacaaat aagctggcgc tcgccacgac gtgtgagcag
 300
 accaaacaag acctattgtc gcgtatccgg ccgatcacta cctcgtggta cggcgattat
 360
 tcagatgatt atatcctgcg cgtcgtaaca ctgggacccc aacgcgt
 407

<210> 584

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 584
 Leu Leu Ile Asn Ala Asp Gly Thr Lys Leu Ser Lys Arg Ser Gly Asp
 1 5 10 15
 Val Arg Val Ala Asp Tyr Met Glu Gln Gly Trp Glu Pro Glu Thr Leu
 20 25 30
 Val Asn Leu Val Ala Leu Thr Gly Tyr Ser Tyr Ala Asn Leu Glu His
 35 40 45
 Ala Asp His Asp Val Lys Thr Met Asn Glu Leu Ile Arg Asp Phe Glu
 50 55 60
 Leu Thr Arg Ile Ser His Thr Arg Ala Thr Leu Pro Met Asp Lys Leu
 65 70 75 80
 Val Phe Leu Asn Lys His His Leu Thr Asn Lys Leu Ala Leu Ala Thr
 85 90 95
 Thr Cys Glu Gln Thr Lys Gln Asp Leu Leu Ser Arg Ile Arg Pro Ile
 100 105 110
 Thr Thr Ser Trp Tyr Gly Asp Tyr Ser Asp Asp Tyr Ile Leu Arg Val
 115 120 125
 Val Thr Leu Gly Pro Gln Arg
 130 135

<210> 585
 <211> 502
 <212> DNA
 <213> Homo sapiens

<400> 585
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 60
 gatattttgt tgtgcgcggt gggattgttg gttcagcacc gtgacatcac tgaggagatt
 120
 cgggctcggt accgacattt cgttgctgac gaataccagg acgtttctcc gctgcagcat
 180
 aggttgcttg aactgtgggt tggcgatcga aatgatgtat gcgtcgtggg agatccgcac
 240
 caggccattc actcttatgc aggcgcacga gctgactacc tcctcgactt cgttgccgat
 300
 catcctggcg ctaaacgcat cgatttggtt cgcaactacc gctccactcc cgagatcggt
 360
 cagttggcca atgaagttct tgtcaaccgt atgactccag aggaggcttt ggaacatggc
 420
 aggggagtca cattggtttc gcggggtcga tccggtcccg agcccatcta tcaggctctc
 480
 ggggacgatg cctccgaagc tt
 502

<210> 586
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 586

Xaa Arg Val Leu Ala Gly Tyr Glu Ala Val Lys Arg Glu Arg Cys Val
 1 5 10 15
 Ile Asp Leu Asp Asp Ile Leu Leu Cys Ala Val Gly Leu Leu Val Gln
 20 25 30
 His Arg Asp Ile Thr Glu Glu Ile Arg Ala Arg Tyr Arg His Phe Val
 35 40 45
 Val Asp Glu Tyr Gln Asp Val Ser Pro Leu Gln His Arg Leu Leu Glu
 50 55 60
 Leu Trp Phe Gly Asp Arg Asn Asp Val Cys Val Val Gly Asp Pro His
 65 70 75 80
 Gln Ala Ile His Ser Tyr Ala Gly Ala Arg Ala Asp Tyr Leu Leu Asp
 85 90 95
 Phe Val Ala Asp His Pro Gly Ala Lys Arg Ile Asp Leu Val Arg Asn
 100 105 110
 Tyr Arg Ser Thr Pro Glu Ile Val Gln Leu Ala Asn Glu Val Leu Val
 115 120 125
 Asn Arg Met Thr Pro Glu Glu Ala Leu Glu His Gly Arg Gly Val Thr
 130 135 140
 Leu Val Ser Arg Gly Arg Ser Gly Pro Glu Pro Ile Tyr Gln Ala Leu
 145 150 155 160
 Gly Asp Asp Ala Ser Glu Ala
 165

<210> 587

<211> 746

<212> DNA

<213> Homo sapiens

<400> 587

gcgtcctgcc tcgagggcct cgggagcttc cgctgcctct gttggccagg ctacagcggc
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 gagctgtgcg aggtggacga ggacgagtgt gcatcgagcc cctgccagca tgggggccga
 120
 tgccctgcagc gctctgacct ggccctctac gggggtgtcc aggccgcctt cctgggcgcc
 180
 ttcagcttcc gccatgctgc gggtttctctg tgccactgcc ctcttggtt tgagggagcc
 240
 gactgcggtg tggaggtgga cgagtgtgcc tcacggccat gcctcaatgg aggccactgc
 300
 caggacctgc ccaatggctt ccagtgtcac tgcccagatg gctacgcagg gccgacatgt
 360
 gaggaagatg tggatgaatg cctgtccgat cctgcctgc acggcggaac ctgcagtgc
 420
 actgtggcag gctatatctg caggtgcccc gagacctggg gtgggcgcga ctgttctgtg
 480
 cagctcactg gctgccaggg ccacacctgc ccgctggctg ccacctgcac cctatcttc
 540
 gagtctgggg tccacagtta cgtctgccac tgcccacctg gtacctatgg accgttctgt
 600
 ggccagaata ccaccttctc tgtgatggct gggagcccca ttcaggcatc agtgccagct
 660
 ggtggccccc tgggtctggc actgaggttt cgcaccacac tgcccgtgg gaccttggcc
 720

actcgcaatg acaccaagga aagctt
746

<210> 588
<211> 248
<212> PRT
<213> Homo sapiens

<400> 588
Ala Ser Cys Leu Glu Gly Leu Gly Ser Phe Arg Cys Leu Cys Trp Pro
1 5 10 15
Gly Tyr Ser Gly Glu Leu Cys Glu Val Asp Glu Asp Glu Cys Ala Ser
20 25 30
Ser Pro Cys Gln His Gly Gly Arg Cys Leu Gln Arg Ser Asp Pro Ala
35 40 45
Leu Tyr Gly Gly Val Gln Ala Ala Phe Pro Gly Ala Phe Ser Phe Arg
50 55 60
His Ala Ala Gly Phe Leu Cys His Cys Pro Pro Gly Phe Glu Gly Ala
65 70 75 80
Asp Cys Gly Val Glu Val Asp Glu Cys Ala Ser Arg Pro Cys Leu Asn
85 90 95
Gly Gly His Cys Gln Asp Leu Pro Asn Gly Phe Gln Cys His Cys Pro
100 105 110
Asp Gly Tyr Ala Gly Pro Thr Cys Glu Glu Asp Val Asp Glu Cys Leu
115 120 125
Ser Asp Pro Cys Leu His Gly Gly Thr Cys Ser Asp Thr Val Ala Gly
130 135 140
Tyr Ile Cys Arg Cys Pro Glu Thr Trp Gly Gly Arg Asp Cys Ser Val
145 150 155 160
Gln Leu Thr Gly Cys Gln Gly His Thr Cys Pro Leu Ala Ala Thr Cys
165 170 175
Ile Pro Ile Phe Glu Ser Gly Val His Ser Tyr Val Cys His Cys Pro
180 185 190
Pro Gly Thr His Gly Pro Phe Cys Gly Gln Asn Thr Thr Phe Ser Val
195 200 205
Met Ala Gly Ser Pro Ile Gln Ala Ser Val Pro Ala Gly Gly Pro Leu
210 215 220
Gly Leu Ala Leu Arg Phe Arg Thr Thr Leu Pro Ala Gly Thr Leu Ala
225 230 235 240
Thr Arg Asn Asp Thr Lys Glu Ser
245

<210> 589
<211> 381
<212> DNA
<213> Homo sapiens

<400> 589
atctcacaag tacaattaca gtctcaagaa ctgagctatc agcaaaagca aggtcttcag
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ccagtacctc tgcaagccac tatgagtgtc gcaactggta tccagccatc gcctgtaaat
120
gtgggttggtg taacttcage tttaggtcag cagccttcca tttccagttt ggctcaaccc
180

cagctaccat attctcaggc ggtctctcca gtgcaaactc cccttccagg ggcaccacca
 240
 cccaacagt tacagtatgg acaacagcaa ccaatgggtt ctacacagat ggccccaggc
 300
 catgtcaaat cagtgactca aaatcttgct tcagagtatg tacaacagca gccatttctt
 360
 caaacagcaa tgtctccgg a
 381

<210> 590

<211> 127

<212> PRT

<213> Homo sapiens

<400> 590

Ile	Ser	Gln	Val	Gln	Leu	Gln	Ser	Gln	Glu	Leu	Ser	Tyr	Gln	Gln	Lys
1			5						10					15	
Gln	Gly	Leu	Gln	Pro	Val	Pro	Leu	Gln	Ala	Thr	Met	Ser	Ala	Ala	Thr
		20					25					30			
Gly	Ile	Gln	Pro	Ser	Pro	Val	Asn	Val	Val	Gly	Val	Thr	Ser	Ala	Leu
	35					40					45				
Gly	Gln	Gln	Pro	Ser	Ile	Ser	Ser	Leu	Ala	Gln	Pro	Gln	Leu	Pro	Tyr
	50				55					60					
Ser	Gln	Ala	Ala	Pro	Pro	Val	Gln	Thr	Pro	Leu	Pro	Gly	Ala	Pro	Pro
65				70					75					80	
Pro	Gln	Gln	Leu	Gln	Tyr	Gly	Gln	Gln	Gln	Pro	Met	Val	Ser	Thr	Gln
			85				90						95		
Met	Ala	Pro	Gly	His	Val	Lys	Ser	Val	Thr	Gln	Asn	Pro	Ala	Ser	Glu
		100					105					110			
Tyr	Val	Gln	Gln	Gln	Pro	Ile	Leu	Gln	Thr	Ala	Met	Ser	Ser	Gly	
		115					120					125			

<210> 591

<211> 684

<212> DNA

<213> Homo sapiens

<400> 591

tcgaccatgg atcatctgcg ccacggcatc cacctgcgtg gttatgcgca gaagaaccgg
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 aagcaggaat acaagcgoga gtcgttcacc ctgttctccg agctgctgga ctcgatcaag
 120
 cgcgattcga ttcgggtcct cttccacgtc caggggcccgg gggaaaaatc cgtatcgaaa
 180
 naaaaagcgc gcctgcgtca ggaagccgaa gccctggccc agcgcgatgca gttcgagcac
 240
 gctgaagccc caggcctgga cgcgccggaa atcctcgggtg aagaagtcga tgcgccctg
 300
 gccaccgcgc cggtagcga cagcagaag ctgggcccgtg acgaactgtg ctactgcggt
 360
 tcgggcaaga agtacaagca ctgccacggt cagatcagct aaggcttcta ccggatactg
 420
 aaatacctgc gccgcgaacc gcattagccg tcgcggcggt tttccatttg aaacactgcc
 480

cttgtgacgg cagtgcagat atcacattaa aaggagggca ttcattgggtg ttggttctgg
 540
 gtccttggcc tacgttgac cgggttgccg gttttgaact cggatcgcc tcggccggta
 600
 tcaagcgccc tgggcgcaag gatgtggtgg cgatgcgctg cgccgaaggt tccacggtagg
 660
 cgggggtggt taccctcaac gcgt
 684

<210> 592
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 592
 Ser Thr Met Asp His Leu Arg His Gly Ile His Leu Arg Gly Tyr Ala
 1 5 10 15
 Gln Lys Asn Pro Lys Gln Glu Tyr Lys Arg Glu Ser Phe Thr Leu Phe
 20 25 30
 Ser Glu Leu Leu Asp Ser Ile Lys Arg Asp Ser Ile Arg Val Leu Phe
 35 40 45
 His Val Gln Gly Pro Gly Glu Lys Ser Val Ser Lys Xaa Lys Ala Arg
 50 55 60
 Leu Arg Gln Glu Ala Glu Ala Leu Ala Gln Arg Met Gln Phe Glu His
 65 70 75 80
 Ala Glu Ala Pro Gly Leu Asp Ala Pro Glu Ile Leu Gly Glu Glu Val
 85 90 95
 Asp Val Ala Leu Ala Thr Ala Pro Val Arg Asn Glu Gln Lys Leu Gly
 100 105 110
 Arg Asn Glu Leu Cys Tyr Cys Gly Ser Gly Lys Lys Tyr Lys His Cys
 115 120 125
 His Gly Gln Ile Ser
 130

<210> 593
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 593
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 300
 ccaaggatcg tcgatttggg cgcctccggg gagctcgggg gtcagggatt cgacacaagg
 360
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 420

accggagact cgggtgcgacg cattcactgg cgtccaccg ctcaccgagg ggacctcatg
 480
 gtccgatgag aggagcaggc ctggaaccca tccgtcgtca tcgtgttgga ttctcgggct
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<210> 594
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 594
 Xaa Arg Val Gln Thr Ala Arg Ser Leu Ala Pro Val Arg Ile Ala Leu
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 Pro Leu Arg Ala Ala Arg Phe Thr Asp Thr Ile Pro Ala Pro Leu Gly
 35 40 45
 Gln Pro Arg Trp Ser Thr Ala Thr Ile Gln Thr Pro Val Ile Pro Thr
 50 55 60
 Thr Arg Gly Arg Phe Val Ile Gly Pro Val Met Met Arg Thr Ile Asp
 65 70 75 80
 Pro Phe Gly Met Ala Arg His His Thr Asp Leu Gly Gln Val Ala Glu
 85 90 95
 Val Ile Val Thr Pro Arg Ile Val Asp Leu Gly Ala Ser Gly Glu Leu
 100 105 110
 Gly Gly Gln Gly Phe Asp Thr Arg Ser Ser Ala Ile His Ala Gly Arg
 115 120 125
 Arg Gly Pro Asp Asp Ala Met Val Arg Asp Trp His Thr Gly Asp Ser
 130 135 140
 Val Arg Arg Ile His Trp Arg Ser Thr Ala His Arg Gly Asp Leu Met
 145 150 155 160
 Val Arg Cys Glu Glu Gln Ala Trp Asn Pro Ser Val Val Ile Val Leu
 165 170 175
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 180 185 190
 Glu Trp Ala Val Asn Ala Val Ala Ser Ile Ser Thr Arg
 195 200 205

<210> 595
 <211> 303
 <212> DNA
 <213> Homo sapiens

<400> 595
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 180

cggagcaagg ctcagaaaaa tgtcccagcc aaaaacatgg tacatgcctg tcatcaggca
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<210> 596
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 596
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 Ala Arg Leu Cys Pro Gln Pro Pro Arg Asn Ser Leu Pro Gly Thr Val
 35 40 45
 Ser Ala Leu Arg Ser Pro Glu Gln Gly Ser Glu Lys Cys Pro Ser Gln
 50 55 60
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<210> 597
 <211> 2709
 <212> DNA
 <213> Homo sapiens

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 360
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 420
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1380
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1860
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1980
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<210> 598

<211> 240

<212> PRT

<213> Homo sapiens

<400> 598

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			20					25					30		
Glu	Cys	Gly	Lys	Ser	Phe	Gly	Asp	Leu	Val	Ser	Arg	Arg	Lys	His	Met
		35					40					45			
Arg	Ile	His	Ile	Val	Lys	Lys	Pro	Val	Glu	Cys	Arg	Gln	Cys	Gly	Lys
		50				55					60				
Thr	Phe	Arg	Asn	Gln	Ser	Ile	Leu	Lys	Thr	His	Met	Asn	Ser	His	Thr
65					70				75					80	
Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Asp	Leu	Cys	Gly	Lys	Ala	Phe	Ser	Ala
				85				90						95	
Ser	Ser	Asn	Leu	Thr	Ala	His	Arg	Lys	Ile	His	Thr	Gln	Glu	Arg	Arg
			100					105					110		
Tyr	Glu	Cys	Ala	Ala	Cys	Gly	Lys	Val	Phe	Gly	Asp	Tyr	Leu	Ser	Arg
		115					120					125			
Arg	Arg	His	Met	Ser	Val	His	Leu	Val	Lys	Lys	Arg	Val	Glu	Cys	Arg
		130					135				140				
His	Cys	Gly	Lys	Ala	Phe	Arg	Asn	Gln	Ser	Thr	Leu	Lys	Thr	His	Met
145					150					155				160	
Arg	Ser	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asp	His	Cys	Gly	Lys
				165					170					175	
Ala	Phe	Ser	Ile	Gly	Ser	Asn	Leu	Asn	Val	His	Arg	Arg	Ile	His	Thr
			180					185					190		
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Leu	Val	Cys	Gly	Lys	Ala	Phe	Ser	Asp
		195					200					205			
His	Ser	Ser	Leu	Arg	Ser	His	Val	Lys	Thr	His	Arg	Gly	Glu	Lys	Leu
		210				215					220				
Phe	Xaa	Cys	His	Pro	Cys	Gly	Lys	Gly	Ser	Ser	Glu	Arg	Ala	Xaa	Leu
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<210> 599
 <211> 340
 <212> DNA
 <213> Homo sapiens

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 240
 tggggctcgt cggaggacga ggatgtgagt ggcgatggct ttgcgcgact gggcgtattc
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 340

<210> 600
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 600
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 20 25 30
 Ser Leu Pro Thr Arg Ser Ser Arg Gly Thr Pro Thr His Gly Ser Asn
 35 40 45
 Cys Arg Pro Ala Pro Arg Pro Ile Gly His Gly Leu Gln Val Gln Gly
 50 55 60
 Met Arg Pro Gly Lys His Ala Trp Ala Lys Arg Cys Arg Leu Arg Cys
 65 70 75 80
 Thr Ala Thr Pro Ser Thr Cys Ala Met Thr Pro Asn Lys Arg Ser Asp
 85 90 95
 Thr Thr Glu Arg Ser His His Asp Val Lys Ser Arg Glu Ala Arg
 100 105 110

<210> 601
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 601
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 cagctgtcga tggccccgct gtctatcggg aatctgcaat cgggtggacgt ggtgcgcggc
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 ggcggcgcgg tgcgctaagg gccgcagaac gtcggcggcg tgatcaactt cgttaccgca
 240

gacattccca aaacgtttgg cggcgccgcc agcgtaaaa cccaggggtgc cagccacggc
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 421

<210> 602
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 602
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 20 25 30
 Ala Val Ala Pro Tyr Gly Gln Pro Gln Leu Ser Met Ala Pro Leu Ser
 35 40 45
 Ile Gly Asn Leu Gln Ser Val Asp Val Val Arg Gly Gly Gly Ala Val
 50 55 60
 Arg Tyr Gly Pro Gln Asn Val Gly Gly Val Ile Asn Phe Val Thr Arg
 65 70 75 80
 Asp Ile Pro Lys Thr Phe Gly Gly Ala Ala Ser Val Gln Thr Gln Gly
 85 90 95
 Ala Ser His Gly Gly Leu Lys Thr Leu Thr Ser Ala Ser Val Gly Gly
 100 105 110
 Thr Ala Asp Asn Gly Leu Gly Ala Glu Leu Leu Tyr Ser Gly Leu His
 115 120 125
 Gly Gln Gly Tyr Arg Asp Asn Asn Asp Asn Thr Asp
 130 135 140

<210> 603
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 603
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 180
 ggcaaaccgg aagacctcgt agagggtgtg cgccgcggtg tggacatggt cgattgcgtg
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 cgtaacgcg
 309

<210> 604

<211> 103
 <212> PRT
 <213> Homo sapiens

<400> 604
 Xaa Gly Gly Met His Glu Ser Leu Arg Lys Arg Ser Leu Glu Gly Leu
 1 5 10 15
 Asp Lys Ile Gly Phe Asp Gly Leu Ala Ile Gly Gly Leu Ser Val Gly
 20 25 30
 Glu Pro Lys His Glu Met Ile Lys Val Leu Asp Tyr Leu Pro Gly Leu
 35 40 45
 Met Pro Ala Asp Lys Pro Arg Tyr Leu Met Gly Val Gly Lys Pro Glu
 50 55 60
 Asp Leu Val Glu Gly Val Arg Arg Gly Val Asp Met Phe Asp Cys Val
 65 70 75 80
 Met Pro Thr Arg Asn Ala Arg Asn Gly His Leu Phe Ile Asp Thr Gly
 85 90 95
 Val Leu Lys Ile Arg Asn Ala
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<210> 605
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 605
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 caccacatc acatttcagt accttggtta tcttcaatcg gaaaaaaaga ttggagtaaa
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<210> 606
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 606
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 20 25 30
 Ser Glu Ala Ile Asn Val Leu Thr Ala Ser Leu Ser Gln Asp Val Ala

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          35              40              45
Trp Gly Pro Leu His Trp Glu Ser Val Ile Thr Phe Gln Asn Ser Ser
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Ser Gln Thr Ala Leu Pro Leu Pro Lys Leu Asn Ile Tyr Ser Asn Leu
65              70              75              80
Phe Phe Arg Leu Lys Ile Ala Lys Val Leu Lys Cys Asp Val Gly Ala
          85              90              95
Asp Val Arg Tyr Phe Thr Lys Tyr Tyr Ala Pro Asp Tyr Ser Pro Ala
          100              105              110
Leu Gly Gln Phe Val Val Gln Glu Asn Thr Asp Arg Val Glu Ile Gly
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Asn Tyr Pro Ile Val Asn Ala
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<210> 607

<211> 366

<212> DNA

<213> Homo sapiens

<400> 607

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366

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<210> 608

<211> 122

<212> PRT

<213> Homo sapiens

<400> 608

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Asn Val Val Thr Gly Val Asn Leu Val Phe Asn Gly Lys His Tyr Gln
          35              40              45
Ile Val Lys Lys Glu Asp Asp Leu Phe Lys Leu Thr Lys Ser Asn Cys
          50              55              60
Tyr Lys Leu Ser Asn Ile Lys Phe Asn Asn Trp Lys Tyr Leu Tyr Leu
65              70              75              80
Thr Thr His Gly Val Tyr Asn Val Phe Thr Asn Ser Phe His Ser Ser
          85              90              95
Cys Pro Phe Leu Leu Gly Thr Thr Leu Pro Gln Thr Phe Lys Lys Pro

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 Thr Asp Glu Lys Tyr Leu Pro Glu Asp Ala
 115 120

<210> 609
 <211> 291
 <212> DNA
 <213> Homo sapiens

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 180
 ccgaagcctc aaacttcccc cgccccgtac gccggggccgg ctccgaagac accggccaca
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 cctggaccat ctggggcggg ggccgcccgg tgggtggtggc ggggtggagcc g
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<210> 610
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 610
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 Lys Gln Asp Pro His Ala Thr Glu Ser Pro Ala Ser Lys Ser Ser Pro
 20 25 30
 Pro Lys Pro Gln Thr Ser Pro Ala Pro Tyr Ala Gly Pro Ala Pro Lys
 35 40 45
 Thr Pro Ala Thr Pro Gly Pro Ser Gly Ala Gly Ala Pro Pro Trp Trp
 50 55 60
 Trp Arg Val Glu Pro
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<210> 611
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 611
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 acgcgcatca ggccgcatcaa aggtcaggta gcgactcttg agcaagcgct tgatgcaggc
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gatttcgcaga acaagtccat tgacgagacc atctctatcg tccgctccta tctgcggttag
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<210> 612
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 612
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 20 25 30
 Pro Glu Glu Lys Lys Gln Ala Leu Thr Arg Ile Arg Arg Ile Lys Gly
 35 40 45
 Gln Val Ala Thr Leu Glu Gln Ala Leu Asp Ala Gly Ala Lys Cys Pro
 50 55 60
 Ala Ile Leu Gln Gln Leu Ala Ala Val Arg Gly Ala Val Asn Gly Leu
 65 70 75 80
 Met Ala Thr Val Leu Glu Ser Tyr Leu Arg Glu Glu Phe Pro Ser Ser
 85 90 95
 Glu Ile Arg Ser Asp Ser Gln Asn Lys Ser Ile Asp Glu Thr Ile Ser
 100 105 110
 Ile Val Arg Ser Tyr Leu Arg
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<210> 613
 <211> 567
 <212> DNA
 <213> Homo sapiens

<400> 613
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 acactggata aagagagtgg agaaagcctc agagtttgca gtgtcaaag ctttttttac
 180
 tagaaattca gatttaccta gaagtccttg gggccaaatc acagatttga aaacatctga
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 agacacccaaa cttaagcaag aattagcaag tgaggaagaa ggtgatgcta aaaacactgt
 360
 gtcaagtgtc actattatgc cggaagccaa tggccatttg aaatatgaca agtttgatga
 420
 tttatgtggc tatttgaggg aagaagagga aagtaccacc gttcaaaaat ttatagacca
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 567

<210> 614
 <211> 187
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Glu Phe Ala Val Ser Asn Ala Phe Phe Thr Arg Asn Ser Asp Leu
 50 55 60
 Pro Arg Ser Pro Trp Gly Gln Ile Thr Asp Leu Lys Thr Ser Glu Gln
 65 70 75 80
 Ile Glu Asp His Asp Glu Ile Tyr Ala Glu Ala Gln Glu Leu Val Asn
 85 90 95
 Asp Trp Leu Asp Thr Lys Leu Lys Gln Glu Leu Ala Ser Glu Glu Glu
 100 105 110
 Gly Asp Ala Lys Asn Thr Val Ser Ser Val Thr Ile Met Pro Glu Ala
 115 120 125
 Asn Gly His Leu Lys Tyr Asp Lys Phe Asp Asp Leu Cys Gly Tyr Leu
 130 135 140
 Glu Glu Glu Glu Glu Ser Thr Thr Val Gln Lys Phe Ile Asp His Leu
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 Leu His Lys Asn Val Val Asp Ser Ala Met Met Glu Asp Leu Gly Arg
 165 170 175
 Lys Glu Asn Gln Asp Lys Lys Gln Gln Lys Asp
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<210> 615
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 615
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 420
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<210> 616

<211> 213

<212> PRT

<213> Homo sapiens

<400> 616

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			20					25					30		
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65				70					75						80
Ala	Val	Ser	Trp	Val	Arg	Val	Glu	Ala	Asp	Glu	Cys	Asp	Arg	Leu	Gly
			85					90					95		
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			100					105					110		
Gly	Val	Glu	Pro	Gly	Tyr	Val	Leu	Ser	Asp	Gly	Phe	Pro	Val	Asp	Gly
		115				120						125			
Leu	Thr	Val	Pro	Asp	Leu	Gly	Met	Trp	Lys	Gly	Asp	Ser	Val	Cys	Ala
	130				135						140				
Cys	Val	Ala	Ala	Ala	Ser	Ile	Val	Ala	Lys	Val	Ala	Arg	Asp	Arg	Ile
145				150					155					160	
Met	Ile	Ala	Met	Asp	Ala	Glu	Ile	Pro	Gly	Tyr	Asp	Phe	Ala	Val	His
			165					170					175		
Lys	Gly	Tyr	Ala	Thr	Ala	Leu	His	Gln	Arg	Arg	Leu	Lys	Glu	Leu	Gly
		180					185					190			
Pro	Ser	Arg	Gln	His	Arg	Met	Ser	Tyr	Ala	Asn	Val	Arg	Arg	Ala	Ala
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Arg	Leu	His	Ser	Ser											
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<210> 617

<211> 337

<212> DNA

<213> Homo sapiens

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 180
 cgaatcctcc gaaacttcga cctgtcccaa caagactctg cactcgtgat ttcacaaagc
 240
 gctgcaacgt cgtgccaatc gagatggccg aggagttcca gcgtcgcggc gtccgcgtcg
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<210> 618

<211> 112

<212> PRT

<213> Homo sapiens

<400> 618

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			20					25					30		
Arg	Cys	Arg	Ser	Thr	Thr	Ser	Ser	Ala	Pro	Thr	Ala	Ser	Ala	Arg	
			35				40					45			
Pro	Cys	Ser	Ser	Lys	Thr	Phe	Pro	Ala	Phe	Pro	Glu	Arg	Ile	Leu	Arg
	50					55					60				
Asn	Phe	Asp	Leu	Ser	Gln	Asp	Ser	Ala	Leu	Val	Ile	Ser	Ser	Ser	
65					70				75					80	
Ala	Ala	Thr	Ser	Cys	Gln	Ser	Arg	Trp	Pro	Arg	Ser	Ser	Ser	Val	Ala
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<211> 425

<212> DNA

<213> Homo sapiens

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<210> 620

<211> 137
 <212> PRT
 <213> Homo sapiens

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 Glu Arg Ala Ser Ile Ala Cys Trp Glu Phe His Leu Ala Ile Glu Lys
 35 40 45
 Ser Ile Lys Val Met Ile His Ser Lys Ser Gly Ser Gly Lys His Gly
 50 55 60
 His Asn Leu Asp Asp Leu Ile Glu His Leu Ser Lys Phe Glu Ser Gly
 65 70 75 80
 Ile Asp Ser Ser Gly Leu Ala Gly Leu Pro Ser Asp Lys Asp Ala Ile
 85 90 95
 Lys Leu Arg Tyr Ala Glu Met Ile Lys Thr Pro Ile Asp Ala Phe Glu
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 Tyr Tyr Leu Ile Ala Ile Arg Phe Val Ala Asp Ile Val Ser Arg Leu
 115 120 125
 Glu His Lys Ile Gly Ile Lys Asn Ala
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<210> 621
 <211> 453
 <212> DNA
 <213> Homo sapiens

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 180
 tcagggtggg ccgaatatca gcgcaaccag gccgtgtgcg gaatccgcct tcccgagggg
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 453

<210> 622
 <211> 151
 <212> PRT
 <213> Homo sapiens

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      20           25           30
Ala Glu Val Ala Gly Arg Ala Met Val Val Glu Glu Leu Asp Met Phe
      35           40           45
Pro Val Glu Cys Val Val Arg Gly Tyr Leu Thr Gly Ser Gly Trp Ala
      50           55           60
Glu Tyr Gln Arg Asn Gln Ala Val Cys Gly Ile Arg Leu Pro Glu Gly
      65           70           75           80
Leu Gln Asn Gly Ser Arg Leu Glu Glu Pro Ile Phe Thr Pro Ala Ile
      85           90           95
Lys Ala Pro Gln Gly Glu His Asp Glu Asn Ile Asp Tyr Leu Arg Leu
      100          105          110
Val Glu Leu Val Gly Pro Xaa Xaa Ser Ala Gln Leu His Asp Leu Ser
      115          120          125
Leu Arg Val Tyr Gln Arg Ala Glu Glu Ile Ala Arg Lys Arg Gly Ile
      130          135          140
Leu Leu Ala Asp Thr Lys Leu
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<210> 623

<211> 345

<212> DNA

<213> Homo sapiens

<400> 623

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tcaacagcat cacctgtgtg tcaccctgtg acatcgaaga tttcaccacc atagagatcc
240
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<210> 624

<211> 111

<212> PRT

<213> Homo sapiens

<400> 624

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      20           25           30
Gly Thr Ile Ala Gln Ala Glu Asp Leu Pro Pro Asp Asp Thr His Thr
      35           40           45
Gly Ala Glu Leu Val Lys Ser Val Val Asn Ser Ile Thr Cys Val Ser
      50           55           60
Pro Leu Tyr Ile Glu Asp Phe Thr Thr Ile Glu Ile Gln Gly Leu Gly

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65              70              75              80
Leu His Cys Val Arg Leu Trp Ala Pro Gly Leu Leu Ala Leu Ser Leu
              85              90              95
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<210> 625
 <211> 339
 <212> DNA
 <213> Homo sapiens

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120
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180
gccaaccacc tcccatgaga gacaggctct ccctgcctga gcttggaccc aggccccttc
240
tgtgtgagc tcagaacaca tgcttgactg tgatgtaaca ggttggcagc cccacagca
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339

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<210> 626
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<400> 626
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              20              25              30
Gln Ala Gly Arg Ala Cys Leu Ser Trp Glu Val Val Gly Trp Val Gly
              35              40              45
Ala Gln Cys Lys Gly Arg Gln Thr Cys Trp Ser Leu Gly Tyr Asp Pro
              50              55              60
Glu Gln Ser Gly Gly Ala Glu Ser Ser Cys Leu Trp Ala Ser Ile Ala
65              70              75              80
Leu Pro Val Asn Tyr Arg Pro Trp Lys Asn His Leu Cys Ile Gln Gln
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Met Ser Ser Ser Ile Met Leu Gly Thr
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<210> 627
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<211> 1294

<212> PRT

<213> Homo sapiens

<400> 628

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Ile	Leu	Glu	Pro	Ile	Gly	Thr	Glu	Ser	Lys	Val	Ser	Gly	Lys	Asn	Lys
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Glu	Phe	Ser	Ala	Asp	Gln	Met	Ser	Glu	Asn	Thr	Asp	Gln	Ser	Asp	Ala
	50				55						60	Glu	Leu	Asn	His
Glu	His	Ser	Leu	His	Val	Gln	Asp	Pro							
65					70				75						80
Ser	Ser	Ser	Ser	Lys	Lys	Asp	Leu	Lys	Ser	Ala	Val	Leu	Ser	Glu	Lys
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Ala	Gly	Phe	Asn	Tyr	Glu	Ser	Pro	Ser	Lys	Gly	Gly	Asn	Phe	Pro	Ser
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Phe	Pro	His	Asp	Glu	Val	Thr	Asp	Arg	Asn	Met	Leu	Ala	Phe	Ser	Ser
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Pro	Ala	Ala	Gly	Gly	Val	Cys	Glu	Pro	Leu	Lys	Ser	Pro	Gln	Arg	Ala
	130				135						140				
Glu	Ala	Asp	Asp	Pro	Gln	Asp	Met	Ala	Cys	Thr	Pro	Ser	Gly	Asp	Ser
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Leu	Glu	Thr	Lys	Glu	Asp	Gln	Lys	Met	Ser	Pro	Lys	Ala	Thr	Glu	Glu
			165					170						175	
Thr	Gly	Gln	Ala	Gln	Ser	Gly	Gln	Ala	Asn	Cys	Gln	Gly	Leu	Ser	Pro
		180					185						190		
Val	Ser	Val	Ala	Ser	Lys	Asn	Pro	Gln	Val	Pro	Ser	Asp	Gly	Gly	Val
		195				200						205			
Arg	Leu	Asn	Lys	Ser	Lys	Thr	Asp	Leu	Leu	Val	Asn	Asp	Asn	Pro	Asp
	210					215					220				
Pro	Ala	Pro	Leu	Ser	Pro	Glu	Leu	Gln	Asp	Phe	Lys	Cys	Asn	Ile	Cys

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225          230          235          240
Gly Tyr Gly Tyr Tyr Gly Asn Asp Pro Thr Asp Leu Ile Lys His Phe
          245          250          255
Arg Lys Tyr His Leu Gly Leu His Asn Arg Thr Arg Gln Asp Ala Glu
          260          265          270
Leu Asp Ser Lys Ile Leu Ala Leu His Asn Met Val Gln Phe Ser His
          275          280          285
Ser Lys Asp Phe Gln Lys Val Asn Arg Ser Val Phe Ser Gly Val Leu
          290          295          300
Gln Asp Ile Asn Ser Ser Arg Pro Val Leu Leu Asn Gly Thr Tyr Asp
305          310          315          320
Val Gln Val Thr Ser Gly Gly Thr Phe Ile Gly Ile Gly Arg Lys Thr
          325          330          335
Pro Asp Cys Gln Gly Asn Thr Lys Tyr Phe Arg Cys Lys Phe Cys Asn
          340          345          350
Phe Thr Tyr Met Gly Asn Ser Ser Thr Glu Leu Glu Gln His Phe Leu
          355          360          365
Gln Thr His Pro Asn Lys Ile Lys Ala Ser Leu Pro Ser Ser Glu Val
          370          375          380
Ala Lys Pro Ser Glu Lys Asn Ser Asn Lys Ser Ile Pro Ala Leu Gln
385          390          395          400
Ser Ser Asp Ser Gly Asp Leu Gly Lys Trp Gln Asp Lys Ile Thr Val
          405          410          415
Lys Ala Gly Asp Asp Thr Pro Val Gly Tyr Ser Val Pro Ile Lys Pro
          420          425          430
Leu Asp Ser Ser Arg Gln Asn Gly Thr Glu Ala Thr Ser Tyr Tyr Trp
          435          440          445
Cys Lys Phe Cys Ser Phe Ser Cys Glu Ser Ser Ser Ser Leu Lys Leu
          450          455          460
Leu Glu His Tyr Gly Lys Gln His Gly Ala Val Gln Ser Gly Gly Leu
465          470          475          480
Asn Pro Glu Leu Asn Asp Lys Leu Ser Arg Gly Ser Val Ile Asn Gln
          485          490          495
Asn Asp Leu Ala Lys Ser Ser Glu Gly Glu Thr Met Thr Lys Thr Asp
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Lys Ser Ser Ser Gly Ala Lys Lys Lys Asp Phe Ser Ser Lys Gly Ala
          515          520          525
Glu Asp Asn Met Val Thr Ser Tyr Asn Cys Gln Phe Cys Asp Phe Arg
          530          535          540
Tyr Ser Lys Ser His Gly Pro Asp Val Ile Val Val Gly Pro Leu Leu
545          550          555          560
Arg His Tyr Gln Gln Leu His Asn Ile His Lys Cys Thr Ile Lys His
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Cys Pro Phe Cys Pro Arg Gly Leu Cys Ser Pro Glu Lys His Leu Gly
          580          585          590
Glu Ile Thr Tyr Pro Phe Ala Cys Arg Lys Ser Asn Cys Ser His Cys
          595          600          605
Ala Leu Leu Leu Leu His Leu Ser Pro Gly Ala Ala Gly Ser Ser Arg
          610          615          620
Val Lys His Gln Cys His Gln Cys Ser Phe Thr Thr Pro Asp Val Asp
625          630          635          640
Val Leu Leu Phe His Tyr Glu Ser Val His Glu Ser Gln Ala Ser Asp
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Val Lys Gln Glu Ala Asn His Leu Gln Gly Ser Asp Gly Gln Gln Ser

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Ala	Asn	Gly	Glu	Glu	Asp	Gly	His	Ala	Ile	Ser	Thr	Ile	Lys	Glu	Glu	
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Pro	Ser	Tyr	Thr	Gln	Ala	Ser	Leu	Gly	Leu	Leu	Thr	Pro	Val	Ser	Gly	
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Ala	His	Leu	Ala	Arg	Pro	Ile	Tyr	Gly	Leu	Ala	Val	Glu	Thr	Lys	Gly	
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Ser	Leu	Leu	Arg	Arg	Arg	Arg	Gly	Ser	Gly	Val	Phe	Cys	Ala	Asn	Cys	
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Leu	Thr	Thr	Lys	Thr	Ser	Leu	Trp	Arg	Lys	Asn	Ala	Asn	Gly	Gly	Tyr	
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Val	Cys	Asn	Ala	Tyr	Gly	Leu	Tyr	Gln	Lys	Leu	His	Ser	Thr	Pro	Arg	
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Ile	His	Lys	Arg	Met	Gln	Pro	Leu	His	Ile	Gln	Ile	Lys	Ser	Pro	Gln	
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Gly	Ser	Ser	Glu	Arg	Gly	Ser	Pro	Ile	Glu	Lys	Tyr	Met	Arg	Pro	Ala	
1075				1080				1085								
Lys	His	Pro	Asn	Tyr	Ser	Pro	Pro	Gly	Ser	Pro	Ile	Glu	Lys	Tyr	Gln	

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      1125      1130      1135
Asn Pro His Tyr Leu Ser His Val Pro Gly Leu Pro Asn Pro Cys Gln
      1140      1145      1150
Asn Tyr Val Pro Tyr Pro Thr Phe Asn Leu Pro Pro His Phe Ser Ala
      1155      1160      1165
Val Gly Ser Asp Asn Asp Ile Pro Leu Asp Leu Ala Ile Lys His Ser
      1170      1175      1180
Arg Pro Gly Pro Thr Ala Asn Gly Ala Ser Lys Glu Lys Thr Lys Ala
1185      1190      1195      1200
Pro Pro Asn Val Lys Asn Glu Gly Pro Leu Asn Val Val Lys Thr Glu
      1205      1210      1215
Lys Val Asp Arg Ser Thr Gln Asp Glu Leu Ser Thr Lys Cys Val His
      1220      1225      1230
Cys Gly Ile Val Phe Leu Asp Glu Val Met Tyr Ala Leu His Met Ser
      1235      1240      1245
Cys His Gly Asp Ser Gly Pro Phe Gln Cys Ser Ile Cys Gln His Leu
      1250      1255      1260
Cys Thr Asp Lys Tyr Asp Phe Thr Thr His Ile Gln Arg Gly Leu His
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<210> 629
 <211> 411
 <212> DNA
 <213> Homo sapiens

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411

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<210> 630
 <211> 137
 <212> PRT
 <213> Homo sapiens

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<400> 630
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      20             25             30
Leu Val Ala Trp Gly Lys Leu Ser Gly Lys Val Ala Ser Lys Pro Leu
      35             40             45
Thr Leu Pro Gly Arg Asn Trp Ile Asn Leu Gly Leu Leu Val Val Ile
      50             55             60
Ile Ala Cys Gly Ile Trp Phe Ser Asn Val Ser Gly Gly Ile Ala Trp
      65             70             75             80
Leu Pro Leu Ala Leu Leu Thr Leu Ala Ser Leu Phe Leu Gly Phe His
      85             90             95
Phe Val Ala Ala Ile Gly Gly Ala Asp Met Pro Val Val Ile Ser Met
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Leu Asn Ser Tyr Ser Gly Trp Ala Ala Phe Ser Gly Phe Ser Leu
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His Ile Pro Val Leu Ile Val Thr Gly
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<210> 631

<211> 275

<212> DNA

<213> Homo sapiens

<400> 631

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<210> 632

<211> 87

<212> PRT

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      20             25             30
Lys Glu Ala Leu Leu Ile Leu Ser Lys Glu Leu Asp Thr Cys Gln Gln
      35             40             45
Glu Arg Asp Gln Tyr Lys Leu Met Ala Asn Gln Leu Arg Glu Arg His
      50             55             60
Gln Ser Leu Lys Lys Lys Tyr Arg Glu Leu Ile Asp Gly Asp Pro Ser
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<210> 633
 <211> 420
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
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<210> 634
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 634
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 Val Asp Ala Val Val Asn Ala Val Glu His Tyr Ser Glu Leu Thr Pro
 35 40 45
 Gln Leu Leu Thr Thr Gly Gly Thr Ser Asp Gly Arg Phe Ile Ala Gln
 50 55 60
 Met Gly Xaa Gln Val Val Glu Leu Gly Pro Val Asn Ala Thr Ile His
 65 70 75 80
 Lys Val Asn Glu Cys Val His Ala Ala Asp Leu Gln Leu Leu Ser Arg
 85 90 95
 Met Tyr Gln Arg Ile Met Glu Gln Leu Val Ala
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<210> 635
 <211> 6918
 <212> DNA
 <213> Homo sapiens

<400> 635
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 480
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<210> 636
 <211> 619
 <212> PRT
 <213> Homo sapiens

<400> 636
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 20 25 30
 Tyr Leu Leu Asp Val Val Asp Ser Glu Glu Gln Asp Met Ala Leu Asn
 35 40 45
 Ile His Ala Phe Ser Ala Gly Leu Gly Gly Ala Ile Gly Tyr Val Leu
 50 55 60
 Gly Gly Leu Asp Trp Thr Gln Thr Phe Leu Gly Ser Trp Phe Arg Thr
 65 70 75 80
 Gln Asn Gln Val Leu Phe Phe Phe Ala Ala Ile Ile Phe Thr Val Ser
 85 90 95
 Val Ala Leu His Leu Phe Ser Ile Asp Glu Glu Gln Tyr Ser Pro Gln
 100 105 110
 Gln Glu Arg Ser Ala Glu Glu Pro Gly Ala Leu Asp Gly Gly Glu Pro
 115 120 125
 His Gly Val Pro Ala Phe Pro Asp Glu Val Gln Ser Glu His Glu Leu
 130 135 140
 Ala Leu Asp Tyr Pro Asp Val Asp Ile Met Arg Ser Lys Ser Asp Ser
 145 150 155 160
 Ala Leu His Val Pro Asp Thr Ala Leu Asp Leu Glu Pro Glu Leu Leu
 165 170 175
 Phe Leu His Asp Ile Glu Pro Ser Ile Phe His Asp Ala Ser Tyr Pro
 180 185 190
 Ala Thr Pro Arg Ser Thr Ser Gln Glu Leu Ala Lys Thr Lys Leu Pro
 195 200 205
 Arg Leu Ala Thr Phe Leu Lys Glu Ala Ala Lys Glu Asp Glu Thr Leu
 210 215 220
 Leu Asp Asn His Leu Asn Glu Ala Lys Val Pro Asn Gly Ser Gly Ser
 225 230 235 240
 Pro Thr Lys Asp Ala Leu Gly Gly Tyr Thr Arg Val Asp Thr Lys Pro
 245 250 255
 Ser Ala Thr Ser Ser Ser Met Arg Arg Arg Arg His Ala Phe Arg Arg
 260 265 270
 Gln Ala Ser Ser Thr Phe Ser Tyr Tyr Gly Lys Leu Gly Ser His Cys
 275 280 285
 Tyr Arg Tyr Arg Arg Ala Asn Ala Val Val Leu Ile Lys Pro Ser Arg

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      290              295              300
Ser Met Ser Asp Leu Tyr Asp Met Gln Lys Arg Gln Arg Gln His Arg
305              310              315              320
His Arg Asn Gln Ser Gly Ala Thr Thr Ser Ser Gly Asp Thr Glu Ser
      325              330              335
Glu Glu Gly Glu Gly Glu Thr Thr Val Arg Leu Leu Trp Leu Ser Met
      340              345              350
Leu Lys Met Pro Arg Glu Leu Met Arg Leu Cys Leu Cys His Leu Leu
      355              360              365
Thr Trp Phe Ser Val Ile Ala Glu Ala Val Phe Tyr Thr Asp Phe Met
      370              375              380
Gly Gln Val Ile Phe Glu Gly Asp Pro Lys Ala Pro Ser Asn Ser Thr
385              390              395              400
Ala Trp Gln Ala Tyr Asn Ala Gly Val Lys Met Gly Cys Trp Gly Leu
      405              410              415
Val Ile Tyr Ala Ala Thr Gly Ala Ile Cys Ser Ala Leu Leu Gln Lys
      420              425              430
Tyr Leu Asp Asn Tyr Asp Leu Ser Val Arg Val Ile Tyr Val Leu Gly
      435              440              445
Thr Leu Gly Phe Ser Val Gly Thr Ala Val Met Ala Met Phe Pro Asn
      450              455              460
Val Tyr Val Ala Met Val Thr Ile Ser Thr Met Gly Ile Val Ser Met
465              470              475              480
Ser Ile Ser Tyr Cys Pro Tyr Ala Leu Leu Gly Gln Tyr His Asp Ile
      485              490              495
Lys Gln Tyr Ile His His Ser Pro Gly Asn Ser Lys Arg Gly Phe Gly
      500              505              510
Ile Asp Cys Ala Ile Leu Ser Cys Gln Val Tyr Ile Ser Gln Ile Leu
      515              520              525
Val Ala Ser Ala Leu Gly Gly Val Val Asp Ala Val Gly Thr Val Arg
      530              535              540
Val Ile Pro Met Val Ala Ser Val Gly Ser Phe Leu Gly Phe Leu Thr
545              550              555              560
Ala Thr Phe Leu Val Ile Tyr Pro Asp Val Ser Glu Glu Ala Lys Glu
      565              570              575
Glu Gln Lys Gly Leu Ser Ser Pro Leu Ala Gly Glu Gly Arg Ala Gly
      580              585              590
Gly Asn Ser Glu Lys Pro Thr Val Leu Lys Leu Thr Arg Lys Glu Gly
      595              600              605
Leu Gln Gly Pro Val Glu Thr Glu Ser Val Val
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<210> 637

<211> 370

<212> DNA

<213> Homo sapiens

<400> 637

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120
acgcaaagac cgtcagttgg caggaaagtt ggttcctggg cccttaatcc atgggtgtttt
180

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tgtaggcctt tattatTTTT cggaatggtt cgggtttattg cgattccagt attcctcact
 240
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<210> 638
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 638
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 Thr Gln Arg Pro Ser Val Gly Arg Lys Val Gly Ser Trp Ser Leu Asn
 20 25 30
 Pro Trp Cys Phe Cys Arg Pro Leu Phe Phe Gly Met Val Arg Phe
 35 40 45
 Ile Ala Ile Pro Val Phe Leu Thr Val Pro Asn Ile Ile Asn Ile Gly
 50 55 60
 Ile Gln Ala Ala Val Val Ala Ile Met Ala Phe Gly Met Thr Phe Val
 65 70 75 80
 Ile Val Thr Ser Gly Ile Asp Leu Ser Val Gly Ser Val Ala Ala Leu
 85 90 95
 Ser Ala Met

<210> 639
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 639
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 gaggccgggg acgcgcaggt ctacgacttc tgtgacaacc aggtgcccg aaccaccgag
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 aaggatcggg actactggcg ggacgtggga actatcgatg cctaccacga cgcgcacatg
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<210> 640
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 640

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Xaa Ala Ser Met Gly Asn Tyr Ile Phe Ser Arg Asp Ala Leu Val Glu
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Ala Leu Phe Ala Asp Ser Gln Ser Ala Glu Ser Arg His Asp Met Gly
          20           25           30
Gly Asp Ile Ile Pro Arg Phe Val Glu Ala Gly Asp Ala Gln Val Tyr
          35           40           45
Asp Phe Cys Asp Asn Gln Val Pro Gly Thr Thr Glu Lys Asp Arg Asp
          50           55           60
Tyr Trp Arg Asp Val Gly Thr Ile Asp Ala Tyr His Asp Ala His Met
65           70           75           80
Asp Leu Val Ser Val Glu Pro Glu Phe Asn Leu Tyr Asn Pro Asp Trp
          85           90           95
Pro Ile Trp Ser Ile Gln Glu Gln Ala Pro Gly Ala Lys Phe
          100           105           110

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<210> 641

<211> 491

<212> DNA

<213> Homo sapiens

<400> 641

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120
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480
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491

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<210> 642

<211> 163

<212> PRT

<213> Homo sapiens

<400> 642

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Arg Val Thr Gly Ala Glu Asn Val Arg Lys Ile Leu Met Gly Glu His
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His Leu Val Ser Thr Glu Trp Pro Arg Ser Thr Arg Met Leu Leu Gly
          20           25           30
Pro Asn Thr Val Ser Asn Ser Ile Gly Asp Ile His Arg Asn Lys Arg
          35           40           45
Lys Val Phe Ser Lys Ile Phe Ser His Glu Ala Leu Glu Ser Tyr Leu

```

```

      50              55              60
Pro Lys Ile Gln Leu Val Ile Gln Asp Thr Leu Arg Ala Trp Ser Ser
65              70              75              80
His Pro Glu Ala Ile Asn Val Tyr Gln Glu Ala Gln Lys Leu Thr Phe
      85              90              95
Arg Met Ala Ile Arg Val Leu Leu Gly Phe Ser Ile Pro Glu Glu Asp
      100              105              110
Leu Gly His Leu Phe Glu Val Tyr Gln Gln Phe Val Asp Asn Val Phe
      115              120              125
Ser Leu Pro Val Asp Leu Pro Phe Ser Gly Tyr Arg Arg Gly Ile Gln
      130              135              140
Ala Arg Gln Ile Leu Gln Lys Gly Leu Glu Lys Ala Ile Arg Glu Lys
145              150              155              160
Leu Gln Cys

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<210> 643
 <211> 628
 <212> DNA
 <213> Homo sapiens

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<400> 643
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120
tggcttgtcc gcaccaagcc caccaagtcc agcccctcac ggcagggctg ggtgtcacca
180
gcctacctgg acaggaggct caagctgtca cctgagtggg gggccgctga ggcccctgag
240
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480
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<210> 644
 <211> 209
 <212> PRT
 <213> Homo sapiens

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<400> 644
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1           5           10           15
Ala Glu Gln Asp Ala Ile Thr Leu Arg Glu Gly Gln Tyr Val Glu Val

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      20      25      30
Leu Asp Ala Ala His Pro Leu Arg Trp Leu Val Arg Thr Lys Pro Thr
      35      40      45
Lys Ser Ser Pro Ser Arg Gln Gly Trp Val Ser Pro Ala Tyr Leu Asp
      50      55      60
Arg Arg Leu Lys Leu Ser Pro Glu Trp Gly Ala Ala Glu Ala Pro Glu
65      70      75      80
Phe Pro Gly Glu Ala Val Ser Glu Asp Glu Tyr Lys Ala Arg Leu Ser
      85      90      95
Ser Val Ile Gln Glu Leu Leu Ser Ser Glu Gln Ala Phe Val Glu Glu
      100      105      110
Leu Gln Phe Leu Gln Ser His His Leu Gln His Leu Glu Arg Cys Pro
      115      120      125
His Val Pro Ile Ala Val Ala Gly Gln Lys Ala Val Ile Phe Arg Asn
      130      135      140
Val Arg Asp Ile Gly Arg Phe His Ser Ser Phe Leu Gln Glu Leu Gln
145      150      155      160
Gln Cys Asp Thr Asp Asp Asp Val Ala Met Cys Phe Ile Lys Asn Gln
      165      170      175
Ala Ala Phe Glu Gln Tyr Leu Glu Phe Leu Val Gly Arg Val Gln Ala
      180      185      190
Glu Ser Val Val Val Ser Thr Ala Ile Gln Glu Phe Tyr Lys Lys Tyr
      195      200      205
Ala

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<210> 645

<211> 417

<212> DNA

<213> Homo sapiens

<400> 645

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180
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<210> 646

<211> 95

<212> PRT

<213> Homo sapiens

<400> 646

Met Val Gly Glu Thr Val Gly Ala Thr Ala Gly Thr Met Glu Leu Arg

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      20             25             30
Gly Ser Val Leu Phe Arg Arg Tyr Trp Arg His Trp Leu Asp Ile Leu
      35             40             45
Gln Pro Ser Gln Glu Ala Gln Lys Val Asp Val Ile Thr Thr Pro Ile
      50             55             60
Phe Gln Met Lys Lys Leu Ser Leu Trp Asp Leu Arg Lys Leu Pro Glu
65             70             75             80
Leu Glu Gln Leu Val Pro Gly Pro Tyr Thr His Ser Thr Val Ser
      85             90             95

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<210> 647

<211> 421

<212> DNA

<213> Homo sapiens

<400> 647

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120
cggtagccat gcgtggcgaa ctctttggc atgggaaaat cgggtgaggc caacgggcac
180
agcaacagga cgtgtccctt gcggcacgtg gcaacacgtc agtatagcgc gtttcgcgcg
240
ggatttcctg tgaatgaagg caagaagtcg ggcacgcac cactgctac cgctcggtgg
300
tacgatagcc gcggcgccac caggttggtt acattccaaa cgcaacgcag gaaccgcgac
360
gaacagcggt ttctgcaaca aacccttat gacgctgggt ctcgggcatt tcagtgtcga
420
c
421

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<210> 648

<211> 90

<212> PRT

<213> Homo sapiens

<400> 648

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Met Gly Lys Ser Gly Glu Ala Asn Gly His Ser Asn Arg Thr Cys Pro
1             5             10             15
Leu Arg His Val Ala Thr Arg Gln Tyr Ser Ala Phe Pro Pro Gly Phe
      20             25             30
Pro Leu Asn Glu Gly Lys Lys Ser Gly Thr His Pro Pro Ala Thr Ala
      35             40             45
Arg Trp Tyr Asp Ser Arg Gly Ala Thr Arg Leu Ala Thr Phe Gln Thr
      50             55             60
Gln Arg Arg Asn Pro His Glu Gln Arg Phe Ser Gln Gln Thr Pro Tyr
65             70             75             80
Asp Ala Gly Ser Arg Ala Phe Gln Cys Arg
      85             90

```

<210> 649
 <211> 563
 <212> DNA
 <213> Homo sapiens

<400> 649
 cgcaacatgc ataaacacat gtgctcctcc gagactcagc tacttccttt gccctctctg
 60
 gacctcagtg tccaggcttg tgcatttagg ggctcagggt tgggctctgt gcctatgagc
 120
 cagtctatgt gtgcaactgtc tgtctgtctg tccgtctgcc agcaaccttc aaggccccag
 180
 gaggggaagg caccaatgga aggtgggggc agggaaggag gtagcgttga caagttccaa
 240
 tgtctggctt tccctcctgg aaaccccgag ctggggctgg ccccccttc ccttcctgtc
 300
 tctctcgtc aagcaagtcc cttctaagag cccctctctg cagacgcccc cagtggaacc
 360
 aagcctagat tcgtgccaa gaaggccgac attttttaga cttgccacgt taaaggggcc
 420
 tgcacaggca cgcactcaaa tccccccctc catgtcctcc gcctgtgcac attcaggcaa
 480
 cccgaaacac acaaagacac ggttgacac agcggccacc tgtgcacaca ggaggtagca
 540
 catggagcgc atctgacccc ggg
 563

<210> 650
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 650
 Met His Lys His Met Cys Ser Ser Glu Thr Gln Leu Leu Pro Leu Pro
 1 5 10 15
 Ser Leu Asp Leu Ser Val Gln Ala Cys Ala Phe Arg Gly Ser Gly Leu
 20 25 30
 Gly Ser Val Pro Met Ser Gln Ser Met Cys Ala Leu Ser Val Cys Leu
 35 40 45
 Ser Val Cys Gln Gln Pro Ser Arg Pro Gln Glu Gly Lys Ala Pro Met
 50 55 60
 Glu Gly Gly Gly Arg Glu Gly Gly Ser Val Asp Lys Phe Gln Cys Leu
 65 70 75 80
 Ala Phe Pro Pro Gly Asn Pro Glu Leu Gly Leu Ala Pro Pro Ser Leu
 85 90 95
 Pro Val Ser Leu Ala Gln Ala Arg Pro Phe
 100 105

<210> 651
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 651

gaattcttca acaagctctc ctgctctagg atcaaggata gacctataca aggtccaaac
 60
 cataatggag tccatggggg caaagttatc tcctggagct cagcagttga tggatatggg
 120
 taggtgtcag cagcggaatt gtattcccat tggagagcag cttcagtcgg tgttggggcaa
 180
 ttctggatac aagcatatga ttggactaca atcctcatct accttaggaa ccttaaacia
 240
 gtcgtctccc acaccttttc cttttagaac tggattgaca tctgggaacg tgactgaaaa
 300
 cttacaagcg tacattgata aaagtacaca actgcctggg ggagagaatt c
 351

<210> 652

<211> 95

<212> PRT

<213> Homo sapiens

<400> 652

Met	Glu	Ser	Met	Gly	Ser	Lys	Leu	Ser	Pro	Gly	Ala	Gln	Gln	Leu	Met
1				5				10						15	
Asp	Met	Val	Arg	Cys	Gln	Gln	Arg	Asn	Cys	Ile	Pro	Ile	Gly	Glu	Gln
			20				25						30		
Leu	Gln	Ser	Val	Leu	Gly	Asn	Ser	Gly	Tyr	Lys	His	Met	Ile	Gly	Leu
			35				40						45		
Gln	Ser	Ser	Ser	Thr	Leu	Gly	Thr	Leu	Asn	Lys	Ser	Ser	Ser	Thr	Pro
			50				55						60		
Phe	Pro	Phe	Arg	Thr	Gly	Leu	Thr	Ser	Gly	Asn	Val	Thr	Glu	Asn	Leu
65					70					75				80	
Gln	Ala	Tyr	Ile	Asp	Lys	Ser	Thr	Gln	Leu	Pro	Gly	Gly	Glu	Asn	
				85					90					95	

<210> 653

<211> 399

<212> DNA

<213> Homo sapiens

<400> 653

nncccgggtg gggctggggg ggggccagca tcagaggagg acatgaccaa gctgtgcaac
 60
 caccggcgga aagctgttgc tatggcaact ctgtaccgca gcatggagac cacctgctca
 120
 cactcttctc ctggagaggg agcgagcccc caaatgttcc aactgtgtc cccagggccc
 180
 cctctgccc gccctccctg togagtctct cctacaactc cacttaatgg gggctcctggc
 240
 tcccttcccc cagaaccacc ctcaagtttc caggccttcc ccactctagc aggccctggg
 300
 gggcttttcc cccaaggct tgetgaccca gtcccttctg ggggcagtag cagccccgt
 360
 ttcttcccaa ggggcaatgc cccctctcca gccccact
 399

<210> 654

<211> 133
 <212> PRT
 <213> Homo sapiens

<400> 654
 Xaa Pro Gly Gly Ala Gly Val Gly Pro Ala Ser Glu Glu Asp Met Thr
 1 5 10 15
 Lys Leu Cys Asn His Arg Arg Lys Ala Val Ala Met Ala Thr Leu Tyr
 20 25 30
 Arg Ser Met Glu Thr Thr Cys Ser His Ser Ser Pro Gly Glu Gly Ala
 35 40 45
 Ser Pro Gln Met Phe His Thr Val Ser Pro Gly Pro Pro Ser Ala Arg
 50 55 60
 Pro Pro Cys Arg Val Pro Pro Thr Thr Pro Leu Asn Gly Gly Pro Gly
 65 70 75 80
 Ser Leu Pro Pro Glu Pro Pro Ser Val Ser Gln Ala Phe Pro Thr Leu
 85 90 95
 Ala Gly Pro Gly Gly Leu Phe Pro Pro Arg Leu Ala Asp Pro Val Pro
 100 105 110
 Ser Gly Gly Ser Ser Ser Pro Arg Phe Leu Pro Arg Gly Asn Ala Pro
 115 120 125
 Ser Pro Ala Pro Pro
 130

<210> 655
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 655
 tgaaggaaat tctctatggc ttgtgttcat catgtagaac agcccatgag gagaatagga
 60
 gatgaggtgg gaagtgcact gggatctggg ggaagaagcc cggggttcaa gactcagcta
 120
 ctgactgcat ggtgtcaaag gattcgggca tcctctctga ggctgagtct tcagatgaca
 180
 gtgagaacag ggacacctgc cctgcccttc tcacggggcg tgtgggcacc catgagcatg
 240
 cttgacaaaat gcaagggtgcc atacaaacag gaactgcaca atctcacgc cgggcctact
 300
 cagcattggt atttttacct ttacatctat atgaagatgt agttccattc cttttaactg
 360
 ttgttttc
 368

<210> 656
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 656
 Met Ala Cys Val His His Val Glu Gln Pro Met Arg Arg Ile Gly Asp
 1 5 10 15
 Glu Val Gly Ser Ala Leu Gly Ser Gly Gly Arg Ser Pro Gly Phe Lys

```

          20          25          30
Thr Gln Leu Leu Thr Ala Trp Cys Gln Arg Ile Arg Ala Ser Ser Leu
          35          40          45
Arg Leu Ser Leu Gln Met Thr Val Arg Thr Gly Thr Pro Ala Leu Pro
          50          55          60
Phe Ser Arg Gly Val Trp Ala Pro Met Ser Met Leu Asp Lys Cys Lys
65          70          75          80
Val Pro Tyr Lys Gln Glu Leu His Asn Leu Thr Ala Arg Pro Thr Gln
          85          90          95
His Cys Tyr Phe Tyr Leu Tyr Ile Tyr Met Lys Met
          100          105

```

<210> 657

<211> 330

<212> DNA

<213> Homo sapiens

<400> 657

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gtcgaccacg gcatgaaaaa gccgggggatg atcctcatca acaaccctg gggcgagtcc
60
aacgaggcgg gcttcaagcg cgcctcgaa gagcgtggca tggccaacgc cggtgtcgag
120
cgtattcagg acagcgacct ggacgtggtg ccgcaattga ccccgctga aaaacgccgg
180
tgccgacacc ttgctgatgg tcggcaacgt cgcccttcg gcacaggtgg tcaagtcct
240
ggaccgcatg ggttgggacg tgctgtggt gtctcactgg gggccggccg gnggtcgctt
300
tggcgagctg gcggggccta acgcttctcg
330

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<210> 658

<211> 102

<212> PRT

<213> Homo sapiens

<400> 658

```

Met Lys Lys Pro Gly Met Ile Leu Ile Asn Asn Pro Trp Gly Glu Ser
  1          5          10          15
Asn Glu Ala Gly Phe Lys Arg Ala Leu Glu Glu Arg Gly Met Ala Asn
          20          25          30
Ala Gly Val Glu Arg Ile Gln Asp Ser Asp Leu Asp Val Val Pro Gln
          35          40          45
Leu Thr Pro Pro Glu Lys Arg Arg Cys Arg His Leu Ala Asp Gly Arg
          50          55          60
Gln Arg Arg Pro Phe Gly Thr Gly Gly Gln Val Pro Gly Pro His Gly
65          70          75          80
Leu Gly Arg Ala Cys Gly Val Ser Leu Gly Ala Gly Arg Xaa Ser Leu
          85          90          95
Trp Arg Ala Gly Gly Ala
          100

```

<210> 659

<211> 1505

<212> DNA

<213> Homo sapiens

<400> 659

gccaggatca tgtccaccac cacatgccaa gtggtggcgt tcctcctgtc catcctgggg
60
ctggccggct gcatcgcggc caccgggatg gacatgtgga gcacccagga cctgtacgac
120
aaccccgta cctccgtggt ccagtacgaa gggctctgga ggagctgctg gaggcagagt
180
tcaggcttca ccgaatgcag gccctatttc accatcctgg gacttccagc catgctgcag
240
gcagtgcgag ccctgatgat cgtaggcatc gtctctgggtg ccattggcct cctggtatcc
300
atctttgccc tgaaatgcat ccgcattggc agcatggagg actctgccaa agccaacatg
360
acactgacct ccgggatcat gttcattgtc tcaggctctt gtgcaattgc tggagtgtct
420
gtgtttgcc acatgctggt gactaacttc tggatgtcca cagctaacat gtacaccggc
480
atgggtggga tgggtgcagac tgttcagacc aggtacacat ttggtgcggc tctgttcgtg
540
ggctgggtcg ctggaggcct cacactaatt ggggggtgtga tgatgtgcat cgctgcccg
600
ggcctggcac cagaagaaac caactacaaa gccgtttctt atcatgcctc aggccacagt
660
gttgccata agcctggagg ctccaaggcc agcactggct ttgggtccaa caccaaaaac
720
aagaagatat acgatggagg tgccgcaca gaggacgagg tacaatctta tccttccaag
780
cacgactatg tgtaatgctc taagacctct cagcacgggc ggaagaaact cccggagagc
840
tcacccaaaa aacaaggaga tcccatctag atttcttctt gcttttgact cacagctgga
900
agttagaaaa gcctcgattt catctttgga gaggccaagt ggtcttagcc tcagtctctg
960
tctctaaata ttccaccata aaacagctga gttatttatg aattagaagc tatagctcac
1020
atthttcaatc ctctatttct ttttttaaat ataactttct actctgatga gagaatgtgg
1080
ttttaatctc tctctcacat tttgatgatt tagacagact cccctctctc ctctagtca
1140
ataaacccat tgatgatcta tttccagct tatccccaag aaaacttttg aaaggaaaga
1200
gtagacccaa agatgttatt ttctgctggt tgaattttgt ctccccaccc ccaacttggc
1260
tagtaataaa cacttactga agaagaagca ataagagaaa gatatttgta atctctccag
1320
cccatgatct cggttttctt aactgtgat cttaaaagt accaaaccaa agtcattttc
1380
agtttgaggc aaccaaacct ttctactgct gttgacatct tcttattaca gcaacaccat
1440
tctaggagtt tcctgagctc tccactggag tcctccctt ctgtcgtctt ctgcgagcgg
1500

taccc
1505

<210> 660
<211> 261
<212> PRT
<213> Homo sapiens

<400> 660
Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu
1 5 10 15
Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr
20 25 30
Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly
35 40 45
Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg
50 55 60
Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg
65 70 75 80
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val
85 90 95
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser
100 105 110
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser
115 120 125
Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val
130 135 140
Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly
145 150 155 160
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe
165 170 175
Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met
180 185 190
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala
195 200 205
Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly
210 215 220
Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
225 230 235 240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser
245 250 255
Lys His Asp Tyr Val
260

<210> 661
<211> 451
<212> DNA
<213> Homo sapiens

<400> 661
nnacgcgtgt agtttgtgta tcggcgcgga actcgccgcg tctgatctcg aggagcttcc
60
cccatggacg agattttaac cttgcttgcc ggaggcggtg acgacgagcc agagtggcat
120

gacaaggcat tatgtgcccc gactgatccg gaggcattct tccctgaaaa ggggtggatcc
 180
 acccgtgagg ccaagcgcac ctgtgagtc tgtgaggtcc gccaggagtg cttggagtag
 240
 gcccttgcca atgacgagag gttcggaatc tggggcggat tgtccgagat ggagaggcgt
 300
 cggctgcgca agcgggcgtg acctgacgtc ggagcgcggt tattgacacg gcccggtaaa
 360
 atgccctgtc tgcccgggat ggctgtctgc acgatgcggc atatgcatg atcgacagcg
 420
 tgggtgtcat cccgtgctcc atgacgtcga c
 451

<210> 662

<211> 85

<212> PRT

<213> Homo sapiens

<400> 662

Met	Asp	Glu	Ile	Leu	Thr	Leu	Leu	Ala	Gly	Gly	Gly	Asp	Asp	Glu	Pro
1				5					10					15	
Glu	Trp	His	Asp	Lys	Ala	Leu	Cys	Ala	Gln	Thr	Asp	Pro	Glu	Ala	Phe
			20					25					30		
Phe	Pro	Glu	Lys	Gly	Gly	Ser	Thr	Arg	Glu	Ala	Lys	Arg	Ile	Cys	Glu
		35				40					45				
Ser	Cys	Glu	Val	Arg	Gln	Glu	Cys	Leu	Glu	Tyr	Ala	Leu	Ala	Asn	Asp
	50				55				60						
Glu	Arg	Phe	Gly	Ile	Trp	Gly	Gly	Leu	Ser	Glu	Met	Glu	Arg	Arg	Arg
65				70				75					80		
Leu	Arg	Lys	Arg	Ala											
				85											

<210> 663

<211> 552

<212> DNA

<213> Homo sapiens

<400> 663

ctcgagcgtc tcgacgccga cgccgcccag ggagccaagg aagacctctc gcagcgcgac
 60
 ccctacgacg tgctcgtcgt aggggcgggt cccgccggtg ccgcggccgc cgtgtacgcg
 120
 gctcgtaagg gcattcgcac cgccatggtc gggctctcga tcggcggcca ggtactcgat
 180
 accgaggcca tcgacaacct catctcgggt ccgcacacca ccggtccgcg tctggccgac
 240
 gccctccgca gccacgtcaa cgactacaac attgacgtta ttgagcgtca gaccgccagc
 300
 gccatagaga ccaccggcgg tatgaccacc gtgcatctga ccgacggcga cctgcggggc
 360
 cgctcagtea tcgtggccac cgggtcccgc tggcgcaacc ttggcgtacc tggcgaggag
 420
 gaataccgca ccaagggtgt gacctactgc ccgcactgcg atggcccgtc attcacaggc
 480

aaaaaggtgg ccgtcgtcgg aggtggaaac tccggtattg aggccgctat cgacctcgcc
 540
 ggcgtcgtcg ac
 552

<210> 664
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 664
 Leu Glu Arg Leu Asp Ala Asp Ala Ala Gln Gly Ala Lys Glu Asp Leu
 1 5 10 15
 Ser Gln Arg Asp Pro Tyr Asp Val Leu Val Val Gly Ala Gly Pro Ala
 20 25 30
 Gly Ala Ala Ala Val Tyr Ala Ala Arg Lys Gly Ile Arg Thr Ala
 35 40 45
 Met Val Gly Ser Arg Ile Gly Gly Gln Val Leu Asp Thr Glu Ala Ile
 50 55 60
 Asp Asn Leu Ile Ser Val Pro His Thr Thr Gly Pro Arg Leu Ala Asp
 65 70 75 80
 Ala Leu Arg Ser His Val Asn Asp Tyr Asn Ile Asp Val Ile Glu Arg
 85 90 95
 Gln Thr Ala Ser Ala Ile Glu Thr Thr Gly Gly Met Thr Thr Val His
 100 105 110
 Leu Thr Asp Gly Asp Leu Arg Ala Arg Ser Val Ile Val Ala Thr Gly
 115 120 125
 Ala Arg Trp Arg Asn Leu Gly Val Pro Gly Glu Glu Glu Tyr Arg Thr
 130 135 140
 Lys Gly Val Thr Tyr Cys Pro His Cys Asp Gly Pro Leu Phe Thr Gly
 145 150 155 160
 Lys Lys Val Ala Val Val Gly Gly Gly Asn Ser Gly Ile Glu Ala Ala
 165 170 175
 Ile Asp Leu Ala Gly Val Val Asp
 180

<210> 665
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 665
 acgcgtacag ttccgctcgg aggttgaaca ccacgatcgg tgtaccggtc acttcgtcga
 60
 acacgtctctt catttcgccc ggcagcagtt cggcgccggc gcagacaaag gtccaggcct
 120
 cgctcacgcg gtggccccgg ccagcggcctt ttccaggatc tcgaaacgca ggctcgtcgg
 180
 cttgggggatg ccgaatcggt cgctgccata cgggaacggc ttcttgatgc cgggtgcgag
 240
 gtagccgagg cgctcgtaga agcgatcaga tcgcgcgcac gtcgatcact gtcattctgca
 300
 ttaccggcac gttccattcg cgcgcggcgt gggcttcggc ggcgtccatc aa
 352

<210> 666
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 666
 Met Glu Arg Ala Gly Asn Ala Asp Asp Ser Asp Arg Arg Ala Arg Asp
 1 5 10 15
 Leu Ile Ala Ser Thr Ser Ala Ala Ala Thr Cys Ala Pro Ala Ser Arg
 20 25 30
 Ser Arg Ser Arg Met Ala Thr Asn Asp Ser Ala Ser Pro Ser Ala Thr
 35 40 45
 Thr Cys Val Ser Arg Ser Trp Lys Ser Arg Trp Pro Gly Pro Pro Arg
 50 55 60
 Glu Arg Gly Leu Asp Leu Cys Leu Arg Arg Arg Thr Ala Ala Gly
 65 70 75 80
 Arg Asn Glu Glu Arg Val Arg Arg Ser Asp Arg Tyr Thr Asp Arg Gly
 85 90 95
 Val Gln Pro Arg Arg Arg Thr Val Arg
 100 105

<210> 667
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 667
 nacgcgtacg aatcggtggt gcgtcgcaac ccaggggagg ccgagttcca ccaggctgtg
 60
 cgggagatct ttgaatctct cggcccgggtg ctcgacaaga atccgcagta cgtggaggca
 120
 gccgtgttgt cgcgcatctg cgaaccggaa cgccagatca ttttcggggt gccgtggggt
 180
 gacgacgagg gcaagatccg tatcaaccgt ggcttcgcg ttgaatatcc gtcggtactg
 240
 gggccgtata aggggtggatt gcgattccac ccctcgggtg acttaggaac gattaagtcc
 300
 cttggttttg agcagatctt caaaaatgct ctgactggca tgccgatcgg tggcgcggaag
 360
 ggtgggtcgg actttgatcc ccatgacgcg t
 391

<210> 668
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 668
 Xaa Ala Tyr Glu Ser Val Leu Arg Arg Asn Pro Gly Glu Ala Glu Phe
 1 5 10 15
 His Gln Ala Val Arg Glu Ile Phe Glu Ser Leu Gly Pro Val Leu Asp
 20 25 30
 Lys Asn Pro Gln Tyr Val Glu Ala Ala Val Leu Ser Arg Ile Cys Glu

```

      35      40      45
Pro Glu Arg Gln Ile Ile Phe Arg Val Pro Trp Val Asp Asp Glu Gly
  50      55      60
Lys Ile Arg Ile Asn Arg Gly Phe Arg Val Glu Tyr Ser Ser Val Leu
  65      70      75      80
Gly Pro Tyr Lys Gly Gly Leu Arg Phe His Pro Ser Val Tyr Leu Gly
      85      90      95
Thr Ile Lys Phe Leu Gly Phe Glu Gln Ile Phe Lys Asn Ala Leu Thr
      100      105      110
Gly Met Pro Ile Gly Gly Ala Lys Gly Gly Ser Asp Phe Asp Pro His
      115      120      125
Asp Ala
      130

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<210> 669
 <211> 707
 <212> DNA
 <213> Homo sapiens

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<400> 669
nngagtccgt tccccgtcta agctcatcgt ggtggtgctg gcatggcgt caacaaggga
  60
attgagaaca cccttgctgc cttcgccac gcggtcgagg tgggatgcac ctacctgaa
  120
actgacgttc acgcgaccag cgacggggtg ctagtggcct tccacgatcc gatactcgat
  180
cgcgctactg aatcaggcgg agtcatcgcc gccatgccgt ggcacaaggc caaacaagcc
  240
aagggttggtg gcgaaccgat cccacacctta gatgagattt tcgacgcctt tcccgaacgg
  300
ttcatcaata tcgacatcaa gcatgatggc gccacatgc cgctcatcga cgttctttcc
  360
cgtcaccggg cttggagtcg gggttgctgc ggtcggttca gcagtaaacy catccagacc
  420
ttccgtcgcc tgggttcaggg acgcaactgcg actgcagtgg ggtcggtggg agtcnnggct
  480
gggctgtcat cagccctcat agcatgcaga tggcacagtc ccatgggaat gcgtaccagg
  540
tgccgcaccg cttgaccggg tnatgggggtg ccccttgatga caccgacctt cattaaagct
  600
gcccacgtgc aggggcgagc tggtcatgtc tggacgggta atgagatctc tgagggtcga
  660
gaactgatgg atatgggggt cgacggcatc gtcacagatc gtccgga
  707

```

<210> 670
 <211> 170
 <212> PRT
 <213> Homo sapiens

```

<400> 670
Met Ala Val Asn Lys Gly Ile Glu Asn Thr Leu Ala Ala Phe Gly His
  1      5      10      15
Ala Val Glu Val Gly Cys Thr Tyr Leu Glu Thr Asp Val His Ala Thr

```

```

      20      25      30
Ser Asp Gly Val Leu Val Ala Phe His Asp Pro Ile Leu Asp Arg Val
      35      40      45
Thr Glu Ser Gly Gly Val Ile Ala Ala Met Pro Trp His Lys Val Lys
      50      55      60
Gln Ala Lys Val Gly Gly Glu Pro Ile Pro Thr Leu Asp Glu Ile Phe
      65      70      75      80
Asp Ala Phe Pro Asp Ala Phe Ile Asn Ile Asp Ile Lys His Asp Gly
      85      90      95
Ala Thr Met Pro Leu Ile Asp Val Leu Ser Arg His Arg Ala Trp Ser
      100      105      110
Arg Val Cys Val Gly Ser Phe Ser Ser Lys Arg Ile Gln Thr Phe Arg
      115      120      125
Arg Leu Val Gln Gly Arg Thr Ala Thr Ala Val Gly Ser Val Gly Val
      130      135      140
Xaa Ala Gly Leu Ser Ser Ala Leu Ile Ala Cys Arg Trp His Ser Pro
      145      150      155      160
Met Gly Met Arg Thr Arg Cys Arg Thr Ala
      165      170

```

<210> 671

<211> 444

<212> DNA

<213> Homo sapiens

<400> 671

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acgcgtgggc cttcgggttg atgggatcag aaggggacgg gacctgtaga aaggggcctg
60
cagctcagag catggggcgg ccttggtcca ctacgcctgc agctgtgaat tcgttctccg
120
gtgctggaga gggatctggt tatctccatt ctcttgtctc cacgtggaaa ggaaggacgt
180
gcgctctcat cctacgtgtt ttgagaaatc gcattgtccc cagctctgcg ggaggatctg
240
gggacgcagt ggggaaccag acaggcagtt ggaggtctag tgcgcgccag aagccagttc
300
ccacccaggg tgccatttgc tgggcgcctt agggagctgc gtgggcatcc agaggagtga
360
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<213> Homo sapiens

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      35          40          45
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Cys Asp Arg His Tyr Leu Cys Ser Arg Ser Phe Ser Ser Cys Gln Tyr
65          70          75          80
Arg Ile Phe Arg Arg Arg Leu His Gln Lys Asn Val Gly Val Thr Ala
      85          90          95
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<400> 675

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Asp	Leu	Leu	Lys	Glu	Lys	Thr	Asp	Asp	Thr	Ser	Gly	Glu	Asp	Asn	Asp			
545	550										555				560			
Glu	Lys	Glu	Ala	Val	Ala	Ser	Lys	Gly	Arg	Lys	Thr	Ala	Asn	Ser	Gln			
565										570				575				
Gly	Arg	Arg	Lys	Gly	Arg	Ile	Thr	Arg	Ser	Met	Ala	Asn	Glu	Ala	Asn			
580										585				590				
Ser	Glu	Glu	Ala	Ile	Thr	Pro	Gln	Gln	Ser	Ala	Glu	Leu	Ala	Ser	Met			

595	600	605
Glu Leu Asn Glu Ser Ser Arg Trp Thr Glu Glu Glu Met Glu Thr Ala		
610	615	620
Lys Lys Gly Leu Leu Glu His Gly Arg Asn Trp Ser Ala Ile Ala Arg		
625	630	635
Met Val Gly Ser Lys Thr Val Ser Gln Cys Lys Asn Phe Tyr Phe Asn		
645	650	655
Tyr Lys Lys Arg Gln Asn Leu Asp Glu Ile Leu Gln Gln His Lys Leu		
660	665	670
Lys Met Glu Lys Glu Arg Asn Ala Arg Arg Lys Lys Lys Lys Ala Pro		
675	680	685
Ala Ala Ala Ser Glu Glu Ala Ala Phe Pro Pro Val Val Glu Asp Glu		
690	695	700
Glu Met Glu Ala Ser Gly Val Ser Gly Asn Glu Glu Glu Met Val Glu		
705	710	715
Glu Ala Glu Ala Leu His Ala Ser Gly Asn Glu Val Pro Arg Gly Glu		
725	730	735
Cys Ser Gly Pro Ala Thr Val Asn Asn Ser Ser Asp Thr Glu Ser Ile		
740	745	750
Pro Ser Pro His Thr Glu Ala Ala Lys Asp Thr Gly Gln Asn Gly Pro		
755	760	765
Lys Pro Pro Ala Thr Leu Gly Ala Asp Gly Pro Pro Pro Gly Pro Pro		
770	775	780
Thr Pro Pro Arg Arg Thr Ser Arg Ala Pro Ile Glu Pro Thr Pro Ala		
785	790	795
Ser Glu Ala Thr Gly Ala Pro Thr Pro Pro Pro Ala Pro Pro Ser Pro		
805	810	815
Ser Ala Pro Pro Pro Val Val Pro Lys Glu Glu Lys Glu Glu Glu Thr		
820	825	830
Ala Ala Ala Pro Pro Val Glu Glu Gly Glu Glu Gln Lys Pro Pro Ala		
835	840	845
Ala Glu Glu Leu Ala Val Asp Thr Gly Lys Ala Glu Glu Pro Val Lys		
850	855	860
Ser Glu Cys Thr Glu Glu Ala Glu Glu Gly Pro Ala Lys Gly Lys Asp		
865	870	875
Ala Glu Ala Ala Glu Ala Thr Ala Glu Gly Ala Leu Lys Ala Glu Lys		
885	890	895
Lys Glu Gly Gly Ser Gly Arg Ala Thr Thr Ala Lys Ser Ser Gly Ala		
900	905	910
Pro Gln Asp Ser Asp Ser Ser Ala Thr Cys Ser Ala Asp Glu Val Asp		
915	920	925
Glu Ala Glu Gly Gly Asp Lys Asn Arg Leu Leu Ser Pro Arg Pro Ser		
930	935	940
Leu Leu Thr Pro Thr Gly Asp Pro Arg Ala Asn Ala Ser Pro Gln Lys		
945	950	955
Pro Leu Asp Leu Lys Gln Leu Lys Gln Arg Ala Ala Ala Ile Pro Pro		
965	970	975
Ile Gln Val Thr Lys Val His Glu Pro Pro Arg Glu Asp Ala Ala Pro		
980	985	990
Thr Lys Pro Ala Pro Pro Ala Pro Pro Pro Pro Gln Asn Leu Gln Pro		
995	1000	1005
Glu Ser Asp Ala Pro Gln Gln Pro Gly Ser Ser Pro Arg Gly Lys Ser		
1010	1015	1020
Arg Ser Pro Ala Pro Pro Ala Asp Lys Glu Ala Phe Ala Ala Glu Ala		

1025 1030 1035 1040
 Gln Lys Leu Pro Gly Asp Pro Pro Cys Trp Thr Ser Gly Leu Pro Phe
 1045 1050 1055
 Pro Val Pro Pro Arg Glu Val Ile Lys Ala Ser Pro His Ala Pro Asp
 1060 1065 1070
 Pro Ser Ala Phe Ser Tyr Ala Pro Pro Gly His Pro Leu Pro Leu Gly
 1075 1080 1085
 Leu His Asp Thr Ala Arg Pro Val Leu Pro Arg Pro Pro Thr Ile Ser
 1090 1095 1100
 Asn Pro Pro Pro Leu Ile Ser Ser Ala Lys His Pro Ser Val Leu Glu
 1105 1110 1115 1120
 Arg Gln Ile Gly Ala Ile Ser Gln Gly Met Ser Val Gln Leu His Val
 1125 1130 1135
 Pro Tyr Ser Glu His Ala Lys Ala Pro Val Gly Pro Val Thr Met Gly
 1140 1145 1150
 Leu Pro Leu Pro Met Asp Pro Lys Lys Leu Ala Pro Phe Ser Gly Val
 1155 1160 1165
 Lys Gln Glu Gln Leu Ser Pro Arg Gly Gln Ala Gly Pro Pro Glu Ser
 1170 1175 1180
 Leu Gly Val Pro Thr Ala Gln Glu Ala Ser Val Leu Arg Gly Thr Ala
 1185 1190 1195 1200
 Leu Gly Ser Val Pro Gly Gly Ser Ile Thr Lys Gly Ile Pro Ser Thr
 1205 1210 1215
 Arg Val Pro Ser Asp Ser Ala Ile Thr Tyr Arg Gly Ser Ile Thr His
 1220 1225 1230
 Gly Thr Pro Ala Asp Val Leu Tyr Lys Gly Thr Ile Thr Arg Ile Ile
 1235 1240 1245
 Gly Glu Asp Ser Pro Ser Arg Leu Asp Arg Gly Arg Glu Asp Ser Leu
 1250 1255 1260
 Pro Lys Gly His Val Ile Tyr Glu Gly Lys Lys Gly His Val Leu Ser
 1265 1270 1275 1280
 Tyr Glu Gly Gly Met Ser Val Thr Gln Cys Ser Lys Glu Asp Gly Arg
 1285 1290 1295
 Ser Ser Ser Gly Pro Pro His Glu Thr Ala Ala Pro Lys Arg Thr Tyr
 1300 1305 1310
 Asp Met Met Glu Gly Arg Val Gly Arg Ala Ile Ser Ser Ala Ser Ile
 1315 1320 1325
 Glu Gly Leu Met Gly Arg Ala Ile Pro Pro Glu Arg His Ser Pro His
 1330 1335 1340
 His Leu Lys Glu Gln His His Ile Arg Gly Ser Ile Thr Gln Gly Ile
 1345 1350 1355 1360
 Pro Arg Ser Tyr Val Glu Ala Gln Glu Asp Tyr Leu Arg Arg Glu Ala
 1365 1370 1375
 Lys Leu Leu Lys Arg Glu Gly Thr Pro Pro Pro Pro Pro Pro Ser Arg
 1380 1385 1390
 Asp Leu Thr Glu Ala Tyr Lys Thr Gln Ala Leu Gly Pro Leu Lys Leu
 1395 1400 1405
 Lys Pro Ala His Glu Gly Leu Val Ala Thr Val Lys Glu Ala Gly Arg
 1410 1415 1420
 Ser Ile His Glu Ile Pro Arg Glu Glu Leu Arg His Thr Pro Glu Leu
 1425 1430 1435 1440
 Pro Leu Ala Pro Arg Pro Leu Lys Glu Gly Ser Ile Thr Gln Gly Thr
 1445 1450 1455
 Pro Leu Lys Tyr Asp Thr Gly Ala Ser Thr Thr Gly Ser Lys Lys His

1460	1465	1470
Asp Val Arg Ser Leu Ile Gly	Ser Pro Gly Arg Thr Phe	Pro Pro Val
1475	1480	1485
His Pro Leu Asp Val Met Ala	Asp Ala Arg Ala Leu	Glu Arg Ala Cys
1490	1495	1500
Tyr Glu Glu Ser Leu Lys Ser	Arg Pro Gly Thr Ala Ser	Ser Ser Gly
1505	1510	1515
Gly Ser Ile Ala Arg Gly Ala	Pro Val Ile Val Pro Glu	Leu Gly Lys
1525	1530	1535
Pro Arg Gln Ser Pro Leu Thr	Tyr Glu Asp His Gly Ala	Pro Phe Ala
1540	1545	1550
Gly His Leu Pro Arg Gly Ser	Pro Val Thr Thr Arg Glu	Pro Thr Pro
1555	1560	1565
Arg Leu Gln Glu Gly Ser Leu	Ser Ser Ser Lys Ala Ser	Gln Asp Arg
1570	1575	1580
Lys Leu Thr Ser Thr Pro Arg	Glu Ile Ala Lys Ser Pro	His Ser Thr
1585	1590	1595
Val Pro Glu His His Pro His	Pro Ile Ser Pro Tyr Glu	His Leu Leu
1605	1610	1615
Arg Gly Val Ser Gly Val Asp	Leu Tyr Arg Ser His Ile	Pro Leu Ala
1620	1625	1630
Phe Asp Pro Thr Ser Ile Pro	Arg Gly Ile Pro Leu Asp	Ala Ala Ala
1635	1640	1645
Ala Tyr Tyr Leu Pro Arg His	Leu Ala Pro Asn Pro Thr	Tyr Pro His
1650	1655	1660
Leu Tyr Pro Pro Tyr Leu Ile	Arg Gly Tyr Pro Asp Thr	Ala Ala Leu
1665	1670	1675
Glu Asn Arg Gln Thr Ile Ile	Asn Asp Tyr Ile Thr Ser	Gln Gln Met
1685	1690	1695
His His Asn Thr Ala Thr Ala	Met Ala Gln Arg Ala Asp	Met Leu Arg
1700	1705	1710
Gly Leu Ser Pro Arg Glu Ser	Ser Ser Leu Ala Leu Asn	Tyr Ala Ala Gly
1715	1720	1725
Pro Arg Gly Ile Ile Asp Leu	Ser Gln Val Pro His Leu	Pro Val Leu
1730	1735	1740
Val Pro Pro Thr Pro Gly Thr	Pro Ala Thr Ala Met Asp	Arg Leu Ala
1745	1750	1755
Tyr Leu Pro Thr Ala Pro Gln	Pro Phe Ser Ser Arg His	Ser Ser Ser
1765	1770	1775
Pro Leu Ser Pro Gly Gly Pro	Thr His Leu Thr Lys Pro	Thr Thr Thr
1780	1785	1790
Ser Ser Ser Glu Arg Glu Arg	Asp Arg Asp Arg Glu Arg	Asp Arg Asp
1795	1800	1805
Arg Glu Arg Glu Lys Ser Ile	Leu Thr Ser Thr Thr Thr	Val Glu His
1810	1815	1820
Ala Pro Ile Trp Arg Pro Gly	Thr Glu Gln Ser Ser Gly	Ser Ser Gly
1825	1830	1835
Ser Ser Gly Gly Gly Gly Gly	Ser Ser Ser Arg Pro Ala	Ser His Ser
1845	1850	1855
His Ala His Gln His Ser Pro	Ile Ser Pro Arg Thr Gln	Asp Ala Leu
1860	1865	1870
Gln Gln Arg Pro Ser Val Leu	His Asn Thr Gly Met Lys	Gly Ile Ile
1875	1880	1885
Thr Ala Val Glu Pro Ser Thr	Pro Thr Val Leu Arg Ser	Thr Ser Thr

1890	1895	1900
Ser Ser Pro Val Arg	Pro Ala Ala Thr Phe	Pro Pro Ala Thr His Cys
1905	1910	1915
Pro Leu Gly Gly Thr	Leu Asp Gly Val Tyr	Pro Thr Leu Met Glu Pro
1925	1930	1935
Val Leu Leu Pro Lys	Glu Ala Pro Arg Val Ala Arg	Pro Glu Arg Pro
1940	1945	1950
Arg Ala Asp Thr Gly	His Ala Phe Leu Ala Lys	Pro Pro Ala Arg Ser
1955	1960	1965
Gly Leu Glu Pro Ala	Ser Ser Pro Ser Lys Gly	Ser Glu Pro Arg Pro
1970	1975	1980
Leu Val Pro Pro Val	Ser Gly His Ala Thr	Ile Ala Arg Thr Pro Ala
1985	1990	1995
Lys Asn Leu Ala Pro	His His Ala Ser Pro	Asp Pro Pro Ala Pro Pro
2005	2010	2015
Ala Ser Ala Ser Asp	Pro His Arg Glu Lys	Thr Gln Ser Lys Pro Phe
2020	2025	2030
Ser Ile Gln Glu Leu	Glu Leu Arg Ser Leu	Gly Tyr His Gly Ser Ser
2035	2040	2045
Tyr Ser Pro Glu Gly	Val Glu Pro Val Ser	Pro Val Ser Ser Pro Ser
2050	2055	2060
Leu Thr His Asp Lys	Gly Leu Pro Lys His	Leu Glu Leu Asp Lys
2065	2070	2075
Ser His Leu Glu Gly	Glu Leu Arg Pro Lys	Gln Pro Gly Pro Val Lys
2085	2090	2095
Leu Gly Gly Glu Ala	Ala His Leu Pro His	Leu Arg Pro Leu Pro Glu
2100	2105	2110
Ser Gln Pro Ser Ser	Ser Pro Leu Leu Gln	Thr Ala Pro Gly Val Lys
2115	2120	2125
Gly His Gln Arg Val	Val Thr Leu Ala Gln	His Ile Ser Glu Val Ile
2130	2135	2140
Thr Gln Asp Tyr Thr	Arg His His Pro Gln	Gln Leu Ser Ala Pro Leu
2145	2150	2155
Pro Ala Pro Leu Tyr	Ser Phe Pro Gly Ala	Ser Cys Pro Val Leu Asp
2165	2170	2175
Leu Arg Arg Pro Pro	Ser Asp Leu Tyr Leu	Pro Pro Pro Asp His Gly
2180	2185	2190
Ala Pro Ala Arg Gly	Ser Pro His Ser Glu	Gly Gly Lys Arg Ser Pro
2195	2200	2205
Glu Pro Asn Lys Thr	Ser Val Leu Gly Gly	Gly Glu Asp Gly Ile Glu
2210	2215	2220
Pro Val Ser Pro Pro	Glu Gly Met Thr Glu	Pro Gly His Ser Arg Ser
2225	2230	2235
Ala Val Tyr Pro Leu	Leu Tyr Arg Asp Gly	Glu Gln Thr Glu Pro Ser
2245	2250	2255
Arg Met Gly Ser Lys	Ser Pro Gly Asn Thr	Ser Gln Pro Pro Ala Phe
2260	2265	2270
Phe Ser Lys Leu Thr	Glu Ser Asn Ser Ala	Met Val Lys Ser Lys Lys
2275	2280	2285
Gln Glu Ile Asn Lys	Lys Leu Asn Thr His	Asn Arg Asn Glu Pro Glu
2290	2295	2300
Tyr Asn Ile Ser Gln	Pro Gly Thr Glu Ile	Phe Asn Met Pro Ala Ile
2305	2310	2315
Thr Gly Thr Gly Leu	Met Thr Tyr Arg Ser	Gln Ala Val Gln Glu His

```

                2325                2330                2335
Ala Ser Thr Asn Met Gly Leu Glu Ala Ile Ile Arg Lys Ala Leu Met
                2340                2345                2350
Gly Lys Tyr Asp Gln Trp Glu Glu Ser Pro Pro Leu Ser Ala Asn Ala
                2355                2360                2365
Phe Asn Pro Leu Asn Ala Ser Ala Ser Leu Pro Ala Ala Met Pro Ile
                2370                2375                2380
Thr Ala Ala Asp Gly Arg Ser Asp His Thr Leu Thr Ser Pro Gly Gly
2385                2390                2395                2400
Gly Gly Lys Ala Lys Val Ser Gly Arg Pro Ser Ser Arg Lys Ala Lys
                2405                2410                2415
Ser Pro Ala Pro Gly Leu Ala Ser Gly Asp Arg Pro Pro Ser Val Ser
                2420                2425                2430
Ser Val His Ser Glu Gly Asp Cys Asn Arg Arg Thr Pro Leu Thr Asn
                2435                2440                2445
Arg Val Trp Glu Asp Arg Pro Ser Ser Ala Gly Ser Thr Pro Phe Pro
2450                2455                2460
Tyr Asn Pro Leu Ile Met Arg Leu Gln Ala Gly Val Met Ala Ser Pro
2465                2470                2475                2480
Pro Pro Pro Gly Leu Pro Ala Gly Ser Gly Pro Leu Ala Gly Pro His
                2485                2490                2495
His Ala Trp Asp Glu Glu Pro Lys Pro Leu Leu Cys Ser Gln Tyr Glu
                2500                2505                2510
Thr Leu Ser Asp Ser Glu
                2515

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<210> 677
 <211> 345
 <212> DNA
 <213> Homo sapiens

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<400> 677
gtaatgcaag gtgaacgccc aatggctgcg cagaacaaga gcattggtca gttcaccctt
60
gagggtatag ctccggcacg ccgtggtggt ccacagattg aagttacttt cgatatcgat
120
gccaacggta tcttgaatgt gagcgcaaag gataaggcta ccggttaagga acagaagatt
180
cgcatcgaag cttcaagtgg tttgagtcag gaagaaatcg acagaatgaa agctgaggca
240
gaacagaatg cagcagcagg caaggctgaa cgcgaaaaga ttgataagct gaaccaagct
300
gactcaatga tttccccccc cgaaaactcc tgaaagacaa cgatn
345

```

<210> 678
 <211> 110
 <212> PRT
 <213> Homo sapiens

```

<400> 678
Val Met Gln Gly Glu Arg Pro Met Ala Ala Gln Asn Lys Ser Ile Gly
1           5           10           15
Gln Phe Thr Leu Glu Gly Ile Ala Pro Ala Arg Arg Gly Val Pro Gln

```

```

      20      25      30
Ile Glu Val Thr Phe Asp Ile Asp Ala Asn Gly Ile Leu Asn Val Ser
      35      40      45
Ala Lys Asp Lys Ala Thr Gly Lys Glu Gln Lys Ile Arg Ile Glu Ala
      50      55      60
Ser Ser Gly Leu Ser Gln Glu Glu Ile Asp Arg Met Lys Ala Glu Ala
65      70      75      80
Glu Gln Asn Ala Ala Ala Gly Lys Ala Glu Arg Glu Lys Ile Asp Lys
      85      90      95
Leu Asn Gln Ala Asp Ser Met Ile Ser Pro Pro Glu Asn Ser
      100      105      110

```

<210> 679

<211> 362

<212> DNA

<213> Homo sapiens

<400> 679

```

acgcgtgacg tcaccgctcc atggggaaga tgacgactat ccctgtgaaa gtaaagcata
60
atgggaaaaa tgtacgttaa atgtgctaac ggcgcagtatg atgtatctat gaatcttgag
120
ggtacaggcc tggatttcaa gcgtagccatt gctgacgtca cgcattgtgcc acccgaacgc
180
caaaaagtac tcatacaggg aggattgcta aaagacgata cccattagg taaagtgggt
240
gcgcgtgcag gacagcagtt catggtgctg ggtgctgtgg gtgagctgcc caaggcccca
300
gaaaaacctg tgctgttccct ggaggatttg ccggaagacg agctcaacaa ggctaaggat
360
cc
362

```

<210> 680

<211> 100

<212> PRT

<213> Homo sapiens

<400> 680

```

Met Gly Lys Met Tyr Val Lys Cys Ala Asn Ala Gln Tyr Asp Val Ser
  1      5      10      15
Met Asn Leu Glu Gly Thr Gly Leu Asp Phe Lys Arg Ala Ile Ala Asp
      20      25      30
Val Thr His Val Pro Pro Glu Arg Gln Lys Val Leu Ile Lys Gly Gly
      35      40      45
Leu Leu Lys Asp Asp Thr Pro Leu Gly Lys Val Gly Ala Arg Ala Gly
      50      55      60
Gln Gln Phe Met Val Leu Gly Ala Val Gly Glu Leu Pro Lys Ala Pro
65      70      75      80
Glu Lys Pro Val Leu Phe Leu Glu Asp Leu Pro Glu Asp Glu Leu Asn
      85      90      95
Lys Ala Lys Asp
      100

```

<210> 681
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 681
 acgcgtccaa atggacaaac gcttgatgat ttctaccatg aaattagagc aaaatatcca
 60
 gaacaattac tgatggcaga ctgttcaaca gtagaagaaa tgattcacgc tgatgaactc
 120
 ggttttgatt ttatcggaag tacttttagta ggatatacaa aacaaagtaa aggtgacaaa
 180
 atcgaagaaa atgactttga aatcttgaga acagtttttag aacgaattaa acatccacta
 240
 attgcagaag gcaatatcga tacacctgaa aagggtgaaac gtgtgcttga gttaggcgcg
 300
 tatagtgtcg ttgtagggtc agcgattact cgtccacaac tcatcacgaa aaaattt
 357

<210> 682
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 682
 Thr Arg Pro Asn Gly Gln Thr Leu Asp Asp Phe Tyr His Glu Ile Arg
 1 5 10 15
 Ala Lys Tyr Pro Glu Gln Leu Leu Met Ala Asp Cys Ser Thr Val Glu
 20 25 30
 Glu Met Ile His Ala Asp Glu Leu Gly Phe Asp Phe Ile Gly Ser Thr
 35 40 45
 Leu Val Gly Tyr Thr Lys Gln Ser Lys Gly Asp Lys Ile Glu Glu Asn
 50 55 60
 Asp Phe Glu Ile Leu Arg Thr Val Leu Glu Arg Ile Lys His Pro Leu
 65 70 75 80
 Ile Ala Glu Gly Asn Ile Asp Thr Pro Glu Lys Val Lys Arg Val Leu
 85 90 95
 Glu Leu Gly Ala Tyr Ser Val Val Val Gly Ser Ala Ile Thr Arg Pro
 100 105 110
 Gln Leu Ile Thr Lys Lys Phe
 115

<210> 683
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 683
 ntctccgacc gcgtggtaaa actggcgacc ttaattgctg aagatgagca agctgaaatg
 60
 aatattgttt tgcccgacgc gtggttgcat gattgcgtca gttaccctaa aaaccatgta
 120
 ttaagagcac aaagtgcatt acatgcagca gataaagcga ttgtattttt gcgcagtatt
 180

aattacccca aacaatactt attagcaatt catcatgcaa tttcagcgca cagtgtcagt
 240
 ggtaaaatac aggcaatgag tttagaagct caaatagtgc aagatgcaga tagattggat
 300
 gcgctagggg caattggcgt ggctcgttgc attcaagtaa gtagccagtt acagcgccca
 360
 ctatattctg aagttgaccc cttcagcgag acacgatctc tagtctgcat g
 411

<210> 684

<211> 137

<212> PRT

<213> Homo sapiens

<400> 684

Xaa	Ser	Asp	Arg	Val	Val	Lys	Leu	Ala	Thr	Leu	Ile	Ala	Glu	Asp	Glu
1				5					10				15		
Gln	Ala	Glu	Met	Asn	Ile	Val	Leu	Pro	Ala	Ala	Trp	Leu	His	Asp	Cys
			20				25					30			
Val	Ser	Tyr	Pro	Lys	Asn	His	Val	Leu	Arg	Ala	Gln	Ser	Ala	Leu	His
		35				40					45				
Ala	Ala	Asp	Lys	Ala	Ile	Val	Phe	Leu	Arg	Ser	Ile	Asn	Tyr	Pro	Lys
	50				55					60					
Gln	Tyr	Leu	Leu	Ala	Ile	His	His	Ala	Ile	Ser	Ala	His	Ser	Val	Ser
65					70				75					80	
Gly	Lys	Ile	Gln	Ala	Met	Ser	Leu	Glu	Ala	Gln	Ile	Val	Gln	Asp	Ala
			85					90					95		
Asp	Arg	Leu	Asp	Ala	Leu	Gly	Ala	Ile	Gly	Val	Ala	Arg	Cys	Ile	Gln
		100					105					110			
Val	Ser	Ser	Gln	Leu	Gln	Arg	Pro	Leu	Tyr	Ser	Glu	Val	Asp	Pro	Phe
	115					120					125				
Ser	Glu	Thr	Arg	Ser	Leu	Val	Cys	Met							
	130				135										

<210> 685

<211> 417

<212> DNA

<213> Homo sapiens

<400> 685

acgcgttgcg ttgcggagtg aacccggaac gatggatgga ttgacactat tcggcctggt
 60
 cgccgtcact gcgatgctgg tctgctatgc catggaggac cgcagccact ggttcgtgct
 120
 gctgttcgcg gccgcttggc gctcggttcg gcctacggct tcttccaagg cgcttgcccg
 180
 ttggcttcg tcgaggcgat atgggcgctc gttgcctgcg gcgtgggtgga cgatcaggcc
 240
 gcgatgaccg catcgctccg cttaaagccc gaaacgaaac cgaccagtgc gctgggttga
 300
 tgggcggcgc gtcgctggat gcacagcgtc tcgacgcgag cgtgatgatg gcctcagcgc
 360
 gtgcatgccg acgctgtcgc tcacgcgct acgctcgacc acggcgcgcg gcaatag
 417

<210> 686
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 686
 Met Pro Trp Arg Thr Ala Ala Thr Gly Ser Cys Cys Cys Ser Arg Pro
 1 5 10 15
 Leu Gly Ala Arg Phe Gly Leu Arg Leu Pro Pro Arg Arg Leu Ala Val
 20 25 30
 Arg Leu Arg Arg Gly Asp Met Gly Ala Arg Cys Leu Arg Arg Gly Gly
 35 40 45
 Arg Ser Gly Arg Asp Asp Arg Ile Val Arg Leu Lys Pro Gly Asn Glu
 50 55 60
 Thr Asp Gln Cys Ala Gly Leu Met Gly Gly Ala Ser Leu Asp Ala Gln
 65 70 75 80
 Arg Leu Asp Ala Ser Val Met Met Ala Ser Ala Arg Ala Cys Arg Arg
 85 90 95
 Cys Arg Ser Ser Arg Tyr Ala Arg Pro Arg Arg Ala Ala Ile
 100 105 110

<210> 687
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 687
 nnacgcgtga ccgaccaact gcgagccacc ctgctcgcca tggetgotat ggggttgac
 60
 gacggcatcg atattccgtc tggggcgatt attgaaagct gccgcacctt atcagccgtt
 120
 ctgatgaaa ccacgggtgg tcgcacgata gagcttcggg taccacctgc gtgcgcggtt
 180
 caattggcgg ccattgagtc gggccccaac caccaccggg gcaactccgcc caatgtggcc
 240
 gagaccgacc ctgtcacctt cctgcagttg gcaactgget tctcacactg gccagaaaatg
 300
 cgctcagcag gacgggttca ggcgtctgga tcccacgtcg acgacgttgc tggcgtgttc
 360
 ccagtcgttg atatggccgg ggttttccgc gacatttttg ccgacgacta ga
 412

<210> 688
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 688
 Xaa Arg Val Thr Asp Gln Leu Arg Ala Thr Leu Leu Ala Met Ala Ala
 1 5 10 15
 Met Gly Leu His Asp Gly Ile Asp Ile Pro Ser Gly Ala Ile Ile Glu
 20 25 30
 Ser Cys Arg Thr Leu Ser Ala Val Leu Asp Glu Thr His Gly Gly Arg


```

      35              40              45
Thr Ile Glu Leu Arg Val Pro Pro Ala Cys Ala Val Gln Leu Ala Ala
  50              55              60
Ile Glu Ser Gly Pro Asn His His Arg Gly Thr Pro Pro Asn Val Ala
  65              70              75              80
Glu Thr Asp Pro Val Thr Phe Leu Gln Leu Ala Thr Gly Phe Ser His
      85              90              95
Trp Pro Glu Met Arg Ser Ala Gly Arg Val Gln Ala Ser Gly Ser His
      100              105              110
Val Asp Asp Val Ala Gly Val Phe Pro Val Val Asp Met Ala Gly Val
      115              120              125
Phe Arg Asp Ile Phe Ala Asp Asp
      130              135

```

<210> 689

<211> 499

<212> DNA

<213> Homo sapiens

<400> 689

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cgcgtcgagg tactcgacgt cgattttcat cacggtaacg gcaccagaa cattttttac
  60
ccgcgcaatg acgtgatgtt catatcgctg caggcgagc cggccgtgtc ctatccctac
  120
tattcggggt tcagcgatga agtcggcgca ggtgttggcg aagggttcaa cctcaactac
  180
ccgctgccga aaaacaccgc ctgggatacc taccgagacg cctgctgca tgctgcagg
  240
aaactccagc aattctcgcc gcaggtattg gtgatctcac tgggggtcga caccttcaag
  300
gacgaccoga tcagtcactt cctgctggaa ggcgaggatt tcatcgggat cggcgagctg
  360
atagcgagtg tgggttgccc caccctgttt gtgatggaag gcggctatat ggtcgatgaa
  420
atcggaatca acgcggtgaa cgtactgcat ggcttcgaga gcaagcgcg cttgagcatcc
  480
gcccgaagac ggcgtgata
  499

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<210> 690

<211> 157

<212> PRT

<213> Homo sapiens

<400> 690

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Arg Val Ala Val Leu Asp Val Asp Phe His His Gly Asn Gly Thr Gln
  1              5              10              15
Asn Ile Phe Tyr Pro Arg Asn Asp Val Met Phe Ile Ser Leu His Gly
      20              25              30
Glu Pro Ala Val Ser Tyr Pro Tyr Tyr Ser Gly Phe Ser Asp Glu Val
      35              40              45
Gly Ala Gly Val Gly Glu Gly Phe Asn Leu Asn Tyr Pro Leu Pro Lys
      50              55              60
Asn Thr Ala Trp Asp Thr Tyr Arg Asp Ala Leu Leu His Ala Cys Arg

```

```

65          70          75          80
Lys Leu Gln Gln Phe Ser Pro Gln Val Leu Val Ile Ser Leu Gly Val
          85          90          95
Asp Thr Phe Lys Asp Asp Pro Ile Ser His Phe Leu Leu Glu Gly Glu
          100          105          110
Asp Phe Ile Gly Ile Gly Glu Leu Ile Ala Ser Val Gly Cys Pro Thr
          115          120          125
Leu Phe Val Met Glu Gly Gly Tyr Met Val Asp Glu Ile Gly Ile Asn
          130          135          140
Ala Val Asn Val Leu His Gly Phe Glu Ser Lys Arg Ala
145          150          155

```

<210> 691
 <211> 336
 <212> DNA
 <213> Homo sapiens

```

<400> 691
ntgctgcgtg aaaacgtgca gcgcggcgca tcagcgactg gcgagcgctt tggctggagt
60
tcgcaaaggc aaggcccctg ggagttggcc tgcgacatcg cgctgccgtg cgccaccag
120
aacgaactgg acgccgacgc cgcccgcacg ctgctgcgca acggctgcct ttgcgtggct
180
ggaggcgcgca atatgccgcc cgcgcttgag gctgtggata tctttatcga ggcgggcatt
240
ctgttcgcgc ccggcaaggc atccaatgcc ggcggcgtgg ccgtgagtgg cctggaaatg
300
tcgcagaacg ccatgcccct gctgtggacc gccggc
336

```

<210> 692
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 692
Xaa Leu Arg Glu Asn Val Gln Arg Gly Ala Ser Ala Thr Gly Glu Arg
1      5      10      15
Phe Gly Trp Ser Ser Gln Arg Gln Gly Pro Trp Glu Leu Ala Cys Asp
20     25     30
Ile Ala Leu Pro Cys Ala Thr Gln Asn Glu Leu Asp Ala Asp Ala Ala
35     40     45
Arg Thr Leu Leu Arg Asn Gly Cys Leu Cys Val Ala Gly Gly Ala Asn
50     55     60
Met Pro Pro Ala Leu Glu Ala Val Asp Ile Phe Ile Glu Ala Gly Ile
65     70     75     80
Leu Phe Ala Pro Gly Lys Ala Ser Asn Ala Gly Gly Val Ala Val Ser
85     90     95
Gly Leu Glu Met Ser Gln Asn Ala Met Arg Leu Leu Trp Thr Ala Gly
100    105    110

```

<210> 693
 <211> 580

<212> DNA

<213> Homo sapiens

<400> 693

```

ngggcaaccc ggaaggtccg gcgtcccagc cgcctacctc gctgggaccc tgggtcttgct
60
gtcccccgct ggctcctgc ccaagcgact gcggccagga tgggcccggaa ggtgaccgtg
120
gccacctgcg cactcaacca gtgggccctg gacttcgagg gcaatttgca aagaatttta
180
aagagtattg aaattgccaa aaacagagga gcaagatata ggcttggacc agagctggaa
240
atatgcggct gcggatgttg ggatcattat tacgagtcgg acaccctctt gcactcgttt
300
caagtcctag cggcccttgt ggagtctccc gtcactcagg acatcatctg cgacgtgggg
360
atacctgtaa tgcaccgaaa cgtccgctac aactgcagag tgatattcct caacaggaag
420
atcctgtcca tcagacccaa gatggccttg gccaatgaag gcaactaccg cgagctgcgc
480
tggttcaccc cgtggtcgag gagtcggtga gtcgggtgcc tgaccactcc tgggatgtgc
540
gttaagcacc tccgctgtgt gtagccttgg gtctgatca
580

```

<210> 694

<211> 136

<212> PRT

<213> Homo sapiens

<400> 694

```

Met Gly Arg Lys Val Thr Val Ala Thr Cys Ala Leu Asn Gln Trp Ala
1           5           10          15
Leu Asp Phe Glu Gly Asn Leu Gln Arg Ile Leu Lys Ser Ile Glu Ile
20          25          30
Ala Lys Asn Arg Gly Ala Arg Tyr Arg Leu Gly Pro Glu Leu Glu Ile
35          40          45
Cys Gly Cys Gly Cys Trp Asp His Tyr Tyr Glu Ser Asp Thr Leu Leu
50          55          60
His Ser Phe Gln Val Leu Ala Ala Leu Val Glu Ser Pro Val Thr Gln
65          70          75          80
Asp Ile Ile Cys Asp Val Gly Ile Pro Val Met His Arg Asn Val Arg
85          90          95
Tyr Asn Cys Arg Val Ile Phe Leu Asn Arg Lys Ile Leu Leu Ile Arg
100         105         110
Pro Lys Met Ala Leu Ala Asn Glu Gly Asn Tyr Arg Glu Leu Arg Trp
115         120         125
Phe Thr Pro Trp Ser Arg Ser Arg
130         135

```

<210> 695

<211> 439

<212> DNA

<213> Homo sapiens

<400> 695

ntgggtgactc aggcgtccaa tggcacgatg gctgacgtcg tcaatatgcc gtcctcgacc
60
atcatgggtc tgctgagggc tgattacctg ctgatatcg agacttcggt gcccggtatc
120
ggcgacaagt tcgtcccga cgtctggggc aaactcaaac tcggcaagga caacgagcac
180
accgctctgc cctggtactt cggcccggtc gtcgtgacgt acaacaagga cattttcaag
240
gatgttggcc tcgatccga aatcccgccg aagacgatga ccgagtacct cgacttcgcc
300
aagaaaatca ccgctgccg caagcaggcg gtctatggca acacgtcgtg gtacatgctc
360
gcggaatggc gtgccctcgg cgtcaaggtc atgaatgacg acttcaccaa gttcactttt
420
gcctcggaat ccaacgcgt
439

<210> 696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 696

Xaa	Val	Thr	Gln	Ala	Ser	Asn	Gly	Thr	Met	Ala	Asp	Val	Val	Asn	Met
1				5				10					15		
Pro	Ser	Ser	Thr	Ile	Met	Ala	Leu	Ser	Arg	Ala	Asp	Tyr	Leu	Leu	Asp
			20					25					30		
Ile	Glu	Thr	Ser	Val	Pro	Gly	Ile	Gly	Asp	Lys	Phe	Val	Pro	Asp	Val
		35					40					45			
Trp	Gly	Lys	Leu	Lys	Leu	Gly	Lys	Asp	Asn	Glu	His	Thr	Ala	Leu	Pro
	50					55				60					
Trp	Tyr	Phe	Gly	Pro	Phe	Val	Val	Thr	Tyr	Asn	Lys	Asp	Ile	Phe	Lys
65					70				75					80	
Asp	Val	Gly	Leu	Asp	Pro	Glu	Ile	Pro	Pro	Lys	Thr	Met	Thr	Glu	Tyr
				85				90					95		
Leu	Asp	Phe	Ala	Lys	Lys	Ile	Thr	Ala	Ala	Gly	Lys	Gln	Ala	Val	Tyr
			100					105					110		
Gly	Asn	Thr	Ser	Trp	Tyr	Met	Leu	Ala	Glu	Trp	Arg	Ala	Leu	Gly	Val
		115				120						125			
Lys	Val	Met	Asn	Asp	Asp	Phe	Thr	Lys	Phe	Thr	Phe	Ala	Ser	Glu	Ser
	130					135					140				
Asn	Ala														
145															

<210> 697

<211> 368

<212> DNA

<213> Homo sapiens

<400> 697

nggcaataac gccgtcgtcg aaatccgttc ccttgatctc gaacatgccg atgaagcggg
60

tgtcggatgat ggggtcggag atgtcgccct cccacaactt gaacttgatc ggaccaaccc
 120
 tttccaccct ggagagactc gcttgccctg aaagtcttct tgcccttctt gggcaactga
 180
 tcgccctccc gaacgagata atccaagctc aagcgaccgc ccaccttgct gcgcgcctcc
 240
 acaccgacgg aatgcgatgc cgggatcgca tcgatgctag cggcgggtgcg tgcaatgaca
 300
 atcttgtctt cagcgacgca tacgggcccc cgttggaat cgaacacaaa caccttgaag
 360
 gcgttgtn
 368

<210> 698

<211> 108

<212> PRT

<213> Homo sapiens

<400> 698

Met	Pro	Met	Lys	Arg	Leu	Ser	Val	Met	Gly	Ser	Glu	Met	Ser	Pro	Ser
1				5					10					15	
His	Asn	Leu	Asn	Leu	Ile	Gly	Pro	Thr	Leu	Ser	Thr	Leu	Glu	Arg	Leu
			20					25					30		
Ala	Cys	Leu	Glu	Ser	Leu	Leu	Ala	Leu	Leu	Gly	Gln	Leu	Ile	Ala	Leu
			35				40					45			
Pro	Asn	Glu	Ile	Ile	Gln	Ala	Gln	Ala	Thr	Ala	His	Leu	Val	Ala	Arg
			50				55				60				
Leu	His	Thr	Asp	Gly	Met	Arg	Cys	Arg	Asp	Arg	Ile	Asp	Ala	Ser	Gly
65					70					75				80	
Gly	Ala	Cys	Asn	Asp	Asn	Leu	Val	Phe	Thr	Gln	Arg	Tyr	Gly	Pro	Ala
			85					90						95	
Val	Gly	Ile	Glu	His	Lys	His	Leu	Glu	Gly	Val	Val				
			100					105							

<210> 699

<211> 363

<212> DNA

<213> Homo sapiens

<400> 699

nacgcgtaca caaatagtat cggaatcatt tcctatcatg ctgctatgac gagatttctc
 60
 cacacctcag attggcaact ggggatgact cggcactacc tgtcgaagcg cggcgacgac
 120
 gaccacacagg cacggtttac tgccgatcga atcgagacgg tgcgcaggct gggcgacgtt
 180
 gcccggaagg agggctgcga gtttgtcgtc gtcgccggag atgtcttcga aaccacaaat
 240
 gtctccactc agatcattgc ccgcgcgtgt gagggcatag cctccattga tctccccgtg
 300
 tacctgctgc ccggaaatca cgacagctta gagccgggggt gtctctggga tgggccagaa
 360
 ttc
 363

<210> 700
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 700
 Xaa Ala Tyr Thr Asn Ser Ile Gly Ile Ile Ser Tyr His Ala Ala Met
 1 5 10 15
 Thr Arg Phe Leu His Thr Ser Asp Trp Gln Leu Gly Met Thr Arg His
 20 25 30
 Tyr Leu Ser Lys Arg Gly Asp Asp Asp Pro Gln Ala Arg Phe Thr Ala
 35 40 45
 Asp Arg Ile Glu Thr Val Arg Arg Leu Gly Asp Val Ala Arg Lys Glu
 50 55 60
 Gly Cys Glu Phe Val Val Val Ala Gly Asp Val Phe Glu Thr His Asn
 65 70 75 80
 Val Ser Thr Gln Ile Ile Ala Arg Ala Cys Glu Ala Ile Ala Ser Ile
 85 90 95
 Asp Leu Pro Val Tyr Leu Leu Pro Gly Asn His Asp Ser Leu Glu Pro
 100 105 110
 Gly Cys Leu Trp Asp Gly Pro Glu Phe
 115 120

<210> 701
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 701
 nacggtccg ggcacaccgt caccgaggcg acgttccacg gccaccccac gctgatctat
 60
 ttccggctacg tccattgcgc ggatgtctgc ccgctgacac tgggcaacat ggtctcggcc
 120
 ctcgatcgcc tgggctcccg ggcggacggc atcgttccga tcttcatctc cgtcgatccg
 180
 gccgcgcaca caccgcgcgt ggtcggacag tatgtcgcgc atttctcgcc gcggatcgtc
 240
 gggctgaccg gcaccgcagc gcagctggcg ccggtactgg cggagttcca catcaccgcg
 300
 cgcgccgaac ctgcggcaca cgacatggcc gccgacatgt atgccgtcga ccacagcgcc
 360
 ctctctatc tgatggacgg caacaaccgc ctgttgcggg tgatggcggt cagcgcgcac
 420
 gctgcctcgc tgacgcacca gctggcgggc ggccctggccg gggcaagaat gagaccatga
 480
 aagcgatcgg accgacggac gccccgaac aggcagcgcc gggctggtcg ttcggcatca
 540
 tcctgtgctc cggcatcgcc ggcattgctc atttcgtcga ccggt
 585

<210> 702
 <211> 159
 <212> PRT

<213> Homo sapiens

<400> 702

```

Xaa Ala Ser Gly His Thr Val Thr Glu Ala Thr Phe His Gly His Pro
 1           5           10           15
Thr Leu Ile Tyr Phe Gly Tyr Val His Cys Ala Asp Val Cys Pro Leu
 20           25           30
Thr Leu Gly Asn Met Val Ser Ala Leu Asp Arg Leu Gly Ser Arg Ala
 35           40           45
Asp Gly Ile Val Pro Ile Phe Ile Ser Val Asp Pro Ala Arg Asp Thr
 50           55           60
Pro Ala Leu Val Gly Gln Tyr Val Ala His Phe Ser Pro Arg Ile Val
 65           70           75           80
Gly Leu Thr Gly Thr Ala Ala Gln Leu Ala Pro Val Leu Ala Glu Phe
 85           90           95
His Ile Thr Ala Arg Ala Glu Pro Ala Ala His Asp Met Ala Ala Asp
100           105           110
Met Tyr Ala Val Asp His Ser Ala Leu Leu Tyr Leu Met Asp Gly Asn
115           120           125
Asn Arg Leu Leu Arg Val Met Ala Val Ser Ala Asp Ala Ala Ser Leu
130           135           140
Thr His Gln Leu Ala Ala Gly Leu Ala Gly Ala Arg Met Arg Pro
145           150           155

```

<210> 703

<211> 390

<212> DNA

<213> Homo sapiens

<400> 703

```

ttctctgctc catacacacc tcagcagaat ggcacgccc agcgcaagaa cataactctt
60
attgagatgg cccgaacgat gcttgatgag tacaagactc cgcggaagtt ctggcctgaa
120
gccattgata ctgcttgatc caccatcaac cgcgtttatc ttcacaaggt tttggagaaa
180
acctcttatg agttcctaac tggtaagaaa cccaatgtaa gctatttcag agtatttggt
240
gctaggtgct ggatcaagga tcctcatcac acttcaaaat ttgcaccgaa agcacatgaa
300
ggttttatgc ttggttacgg aaaggattcg cactcctaca gagtcttcaa cctctttcac
360
tataaagtgg ttcaaactgt ggatgtgcgn
390

```

<210> 704

<211> 130

<212> PRT

<213> Homo sapiens

<400> 704

```

Phe Ser Ala Pro Tyr Thr Pro Gln Gln Asn Gly Ile Ala Glu Arg Lys
 1           5           10           15
Asn Ile Thr Leu Ile Glu Met Ala Arg Thr Met Leu Asp Glu Tyr Lys

```

```

      20      25      30
Thr Pro Arg Lys Phe Trp Pro Glu Ala Ile Asp Thr Ala Cys His Thr
      35      40      45
Ile Asn Arg Val Tyr Leu His Lys Val Leu Glu Lys Thr Ser Tyr Glu
      50      55      60
Phe Leu Thr Gly Lys Lys Pro Asn Val Ser Tyr Phe Arg Val Phe Gly
65      70      75      80
Ala Arg Cys Trp Ile Lys Asp Pro His His Thr Ser Lys Phe Ala Pro
      85      90      95
Lys Ala His Glu Gly Phe Met Leu Gly Tyr Gly Lys Asp Ser His Ser
      100      105      110
Tyr Arg Val Phe Asn Leu Phe His Tyr Lys Val Val Gln Thr Val Asp
      115      120      125
Val Arg
      130

```

<210> 705
 <211> 513
 <212> DNA
 <213> Homo sapiens

```

<400> 705
acgcgtat ttt cgtccaaatg attcaaatca aaacgccgcc gttaaaaacg atgcaggcga
60
agacaatgcg aataaaaaag gtggtaaata agcatgagtt ttaaaatgac acaatctcaa
120
tacacaagtc tttatggacc aactgtagga gactccgtga gattaggaga tacgaacttg
180
tttgcacaa g ttgagaaaga ctatgcaaat tatggggatg aagctacttt cggtgggcga
240
aaatcaattc gtgatgggtat ggctcaaaat cctaattgtga caagagatga taaaaatgta
300
gccgatttag ttttaactaa cgcattaatt attgattatg acaagattgt taaagcagat
360
atcgggtatta aaaatgggta tatttttaag attggtaaag ctggaaaccc agatataatg
420
gataacgttg acatcatcat tgggtgcaaca actgatatta ttgctgctga aggtaaaatt
480
gttactgccg gcggtatcga tacacacgtg cac
513

```

<210> 706
 <211> 140
 <212> PRT
 <213> Homo sapiens

```

<400> 706
Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr Gly Pro
1      5      10      15
Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe Ala Gln
      20      25      30
Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe Gly Gly
      35      40      45
Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val Thr Arg

```



```

      50              55              60
Asp Asp Lys Asn Val Ala Asp Leu Val Leu Thr Asn Ala Leu Ile Ile
65              70              75              80
Asp Tyr Asp Lys Ile Val Lys Ala Asp Ile Gly Ile Lys Asn Gly Tyr
      85              90              95
Ile Phe Lys Ile Gly Lys Ala Gly Asn Pro Asp Ile Met Asp Asn Val
      100             105             110
Asp Ile Ile Ile Gly Ala Thr Thr Asp Ile Ile Ala Ala Glu Gly Lys
      115             120             125
Ile Val Thr Ala Gly Gly Ile Asp Thr His Val His
      130             135             140

```

<210> 707

<211> 409

<212> DNA

<213> Homo sapiens

<400> 707

```

acgcgtggca tcctcagacc accaaagaca atcctgtcct gggaggcagg gagaaagccg
60
gcacactaca cagtgcacag gtgaagccct caggggggtcc tggagcaggg ccacctccct
120
gggggatccc caggtgccat tttcatggca gtgtctatgg acggctcccc ttggcatggt
180
gtcgggtggc aatcctggct gtagctgcca cccctgccc tttttgcttc cctccgaggg
240
cattgtgatc atcagtgtga gtctgttggg aaggagagcc aggtccccag gtttgggaaa
300
ggagtagggt ttcccagcct gtctggccat cccccccag ccagcccct cctgctgggt
360
gacgtgctca gttcggcccc tgctgtactg ggagggggct aggagcata
409

```

<210> 708

<211> 136

<212> PRT

<213> Homo sapiens

<400> 708

```

Met Leu Leu Ala Pro Ser Gln Tyr Ser Arg Gly Arg Thr Glu His Val
1      5      10      15
Thr Gln Gln Glu Gly Leu Gly Trp Gly Val Met Ala Arg Gln Ala Gly
      20      25      30
Lys Pro Tyr Ser Phe Pro Lys Pro Gly Asp Leu Ala Leu Leu Pro Asn
      35      40      45
Arg Leu Thr Leu Met Ile Thr Met Pro Ser Glu Gly Ser Lys Lys Gly
      50      55      60
Arg Gly Trp Gln Leu Gln Pro Gly Leu Pro Pro Ser Thr Met Pro Arg
65      70      75      80
Gly Ala Val His Arg His Cys His Glu Asn Gly Thr Trp Gly Ser Pro
      85      90      95
Arg Glu Val Ala Leu Leu Gln Asp Pro Leu Arg Ala Ser Pro Val His
      100     105     110
Cys Val Val Cys Arg Leu Ser Pro Cys Leu Pro Gly Gln Asp Cys Leu

```

115 120 125
 Trp Trp Ser Glu Asp Ala Thr Arg
 130 135

<210> 709
 <211> 771
 <212> DNA
 <213> Homo sapiens

<400> 709
 acgcgtctga cggagagcct cctgagtctc cccacgcaga ggactcagaa agggaatcgg
 60
 tgaccacacc tgggccagcg acgtgtggtg cgccagcctc cccagcggat cacctcctcc
 120
 tccccctccca ggaggagagt ttctccgaag tccccatgag tgaagcaagc tcagcgaaag
 180
 acactccact ctttaggatg gagggagagg atgcccttgt gactcagtat cagagcaaag
 240
 ccagtgacca cgaagggttta ttgtctgacc ccttgagtga ccttcagttg gtctcagatt
 300
 ttaaattctcc aatcatggcc gatctgaact taagccttcc ttccattcct gaagtcgcat
 360
 cggatgatga aagaatagat cagggtgaag atgacggaga tcagggtgaa gatgatggag
 420
 agacagcaaa gtcgtcaact ctggacatag gagctttgtc cttgggcttg gtagtccct
 480
 gtcttgagag gggaaagggg cccagtggcg aggcagatag gttggtactg ggggagggcc
 540
 tgtgtgattt caggctgcaa gcacccagc catctgtgac agctccttca gagcagacca
 600
 cagagttcgg aattcacaaa ccacatcttg gcaagagctc aagcttggat aaacagctgc
 660
 caggccccag tgggtggtgag gaagaaaaac cgatgggaaa tgggagtcca agcccgctc
 720
 ctggcacatc cctggacaat cctgtaccca gccctcccc ttctgagatc t
 771

<210> 710
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 710
 Met Ser Glu Ala Ser Ser Ala Lys Asp Thr Pro Leu Phe Arg Met Glu
 1 5 10 15
 Gly Glu Asp Ala Leu Val Thr Gln Tyr Gln Ser Lys Ala Ser Asp His
 20 25 30
 Glu Gly Leu Leu Ser Asp Pro Leu Ser Asp Leu Gln Leu Val Ser Asp
 35 40 45
 Phe Lys Ser Pro Ile Met Ala Asp Leu Asn Leu Ser Leu Pro Ser Ile
 50 55 60
 Pro Glu Val Ala Ser Asp Asp Glu Arg Ile Asp Gln Val Glu Asp Asp
 65 70 75 80
 Gly Asp Gln Val Glu Asp Asp Gly Glu Thr Ala Lys Ser Ser Thr Leu

					85						90						95
Asp	Ile	Gly	Ala	Leu	Ser	Leu	Gly	Leu	Val	Val	Pro	Cys	Pro	Glu	Arg		
					100						105						110
Gly	Lys	Gly	Pro	Ser	Gly	Glu	Ala	Asp	Arg	Leu	Val	Leu	Gly	Glu	Gly		
					115						120						125
Leu	Cys	Asp	Phe	Arg	Leu	Gln	Ala	Pro	Gln	Ala	Ser	Val	Thr	Ala	Pro		
					130						135						140
Ser	Glu	Gln	Thr	Thr	Glu	Phe	Gly	Ile	His	Lys	Pro	His	Leu	Gly	Lys		
					145						150						155
Ser	Ser	Ser	Leu	Asp	Lys	Gln	Leu	Pro	Gly	Pro	Ser	Gly	Gly	Glu	Glu		
					165						170						175
Glu	Lys	Pro	Met	Gly	Asn	Gly	Ser	Pro	Ser	Pro	Pro	Pro	Gly	Thr	Ser		
					180						185						190
Leu	Asp	Asn	Pro	Val	Pro	Ser	Pro	Ser	Pro	Ser	Glu	Ile					
					195						200						205

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<210> 711
<211> 432
<212> DNA
<213> Homo sapiens
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```
<400> 711
nnggatccga cggcgcaaaag ccttaaatgaa gggtaggcag ttacctcttt ttctgtagga
60
attctcctgt tttatatcta ctcccccta gggtcatcct actccctcat cttctgagct
120
aatgtgcccc ctttatttgc acttgcatgg aatatgatta tgaacacagt ttttatcatt
180
gatgaccacc ccgttatcag gttggcgatt cgtatgttgt tggaacacga gggttataag
240
gtcgttggtg aaacggacaa cggttgtgac gcgatccaaa tggttcgga atgcctgccg
300
gacctgatca tcctggatat cagcatcccc aaactcgacg gcctcgaagt gctctgccga
360
ttcaacgcca tgaacacatc catgaaaacc ctgattctta ccgccagag tccgacgttg
420
ttcgccacgc gt
432
```

```
<210> 712
<211> 93
<212> PRT
<213> Homo sapiens
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```

<400> 712
Met Ile Met Asn Thr Val Phe Ile Ile Asp Asp His Pro Val Ile Arg
 1             5             10             15
Leu Ala Ile Arg Met Leu Leu Glu His Glu Gly Tyr Lys Val Val Gly
      20             25             30
Glu Thr Asp Asn Gly Cys Asp Ala Ile Gln Met Val Arg Glu Cys Leu
      35             40             45
Pro Asp Leu Ile Ile Leu Asp Ile Ser Ile Pro Lys Leu Asp Gly Leu
      50             55             60
Glu Val Leu Cys Arg Phe Asn Ala Met Asn Thr Ser Met Lys Thr Leu

```

```
<210> 714
<211> 155
<212> PRT
<213> Homo sapiens
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804

<210> 715
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 715
 nnaccggtgg atgccaacga atatcgtggc gagctgaaag tcggcgccat caccaccgcc
 60
 cagaccggcc tgctgcctca ggcactgggtg cgtttgcgcc aggcagcgcc gacggtggag
 120
 tgcaagtgtg taccgggggt ttccttgagg ttgctcagcc aggtggacgc aggcgagctg
 180
 gactcggcga tcatcattcg cccgcccttt gatttgccca aggagttgca cgtacaggta
 240
 ctgcgcaagg agccgtttgt gttgatcgtg cccagggcgg tcgggggtga tgaccggtg
 300
 caactgctcg aagctcatcc ccacgtgcgc tacgaccgcg cttegtttgg cggg
 354

<210> 716
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 716
 Xaa Pro Val Asp Ala Asn Glu Tyr Arg Gly Glu Leu Lys Val Gly Ala
 1 5 10 15
 Ile Thr Thr Ala Gln Thr Gly Leu Leu Pro Gln Ala Leu Val Arg Leu
 20 25 30
 Arg Gln Ala Ala Pro Thr Val Glu Cys Lys Leu Val Pro Gly Val Ser
 35 40 45
 Leu Glu Leu Leu Ser Gln Val Asp Ala Gly Glu Leu Asp Ser Ala Ile
 50 55 60
 Ile Ile Arg Pro Pro Phe Asp Leu Pro Lys Glu Leu His Val Gln Val
 65 70 75 80
 Leu Arg Lys Glu Pro Phe Val Leu Ile Val Pro Gln Ala Val Gly Gly
 85 90 95
 Asp Asp Pro Leu Gln Leu Leu Glu Ala His Pro His Val Arg Tyr Asp
 100 105 110
 Arg Ala Ser Phe Gly Gly
 115

<210> 717
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 717
 acgcgtatct ttccggtaaa cctactaatt ttccattcaa cgctcgacgc ccaggtaaag
 60
 ccgttaagtc atctaaatag gccattctgt ggctctccat cagtaagaac caaatccata
 120
 ggagaagttg agcggatagt aatgcatcaa attgatgctg agaaaccgaa aaatgggaca
 180

atataatcaa gctgacaata ctgatcaaac cactcgcatg aaagctacta ccgcttgacc
 240
 accaagcaga aaaaaccaat gaaatgctta aaaataaaat cgtccaaagt aaaaagctag
 300
 accaggtggt agccagatta aaaataggcc gctctagaaa atgaaaagaa atccaatgag
 360
 attcaacggc gtagcaccag cacagcaaca tagccactag t
 401

<210> 718
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 718
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 His Phe Leu Glu Arg Pro Ile Phe Asn Leu Ala Thr Thr Trp Ser Ser
 20 25 30
 Phe Leu Leu Trp Thr Ile Leu Phe Leu Ser Ile Ser Leu Val Phe Ser
 35 40 45
 Ala Trp Trp Ser Ser Gly Ser Ser Phe His Ala Ser Gly Leu Ile Ser
 50 55 60
 Ile Val Ser Leu Ile Ile Leu Ser His Phe Ser Val Ser Gln His Gln
 65 70 75 80
 Phe Asp Ala Leu Leu Ser Ala Gln Leu Leu Leu Trp Ile Trp Phe Leu
 85 90 95
 Leu Met Glu Ser His Arg Met Ala Tyr Leu Asp Asp Leu Thr Ala Leu
 100 105 110
 Pro Gly Arg Arg Ala Leu Asn Glu Lys Leu Val Gly Leu Pro Lys Arg
 115 120 125
 Tyr Ala
 130

<210> 719
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 719
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 ctcttgaagg cggattttca taggcgctgc gcctctcata ttcaagcatc aaggcaatcc
 120
 aatctccctg cgttggtaac tgggcaaaag aaagacctct gcagtccagc aacctcatcg
 180
 tgcaaatgcc gtggcgtggt caactctgac ggcttgaag ctgcagacct tgtcaaagga
 240
 cctcgccga aattcaccct tgatctcttt gtcttgtcca actcttgtcc ctgagaatga
 300
 aactgtcttc tgagagtcca tcaatgcgac gctgactcgt gagaagtgtc gaatcacgtc
 360
 gccatttttg agacctgcc acgcagctct ggaacctgcc aggacgcctt ccacaacacc
 420

agaacgcagc gactttgcgt taaatccaag ctcaaacacc tcttgctcca caggcctgag
 480
 cataaaaagg tattctgcga cgggaaatgt aaagtctgag cttaggtgca gaggaccgcc
 540
 atcgatcagt gtctgatact gcttgccgc gacttctttg ccgagcaatg ggtatagcgt
 600
 tttcaaccaa gtggaagcag tcgtttgctc accctggcga ttccggcgag ttagggacat
 660
 gaccacgtca tcgatgggat tttgc
 685

<210> 720

<211> 161

<212> PRT

<213> Homo sapiens

<400> 720

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Thr	Trp	Leu	Lys	Thr	Leu	Tyr	Pro	Leu	Leu	Gly	Lys	Glu	Val	Ala	Asp
			20				25					30			
Lys	Gln	Tyr	Gln	Thr	Leu	Ile	Asp	Gly	Gly	Thr	Leu	His	Leu	Ser	Ser
		35				40				45					
Asp	Phe	Thr	Phe	Pro	Val	Ala	Glu	Tyr	Leu	Phe	Met	Leu	Arg	Pro	Val
	50				55				60						
Glu	Gln	Glu	Val	Phe	Glu	Leu	Gly	Phe	Asn	Ala	Lys	Ser	Leu	Arg	Ser
65				70				75					80		
Gly	Val	Val	Glu	Gly	Val	Leu	Ala	Gly	Ser	Arg	Ala	Ala	Leu	Ala	Gly
			85					90					95		
Leu	Gln	Asn	Gly	Asp	Val	Ile	Gln	His	Phe	Ser	Arg	Val	Ser	Val	Ala
		100					105					110			
Leu	Met	Asp	Ser	Gln	Lys	Thr	Val	Ser	Phe	Ser	Gly	Thr	Arg	Val	Gly
		115				120					125				
Gln	Asp	Lys	Glu	Ile	Lys	Gly	Glu	Phe	Arg	Pro	Arg	Ser	Phe	Asp	Lys
	130					135				140					
Val	Cys	Ser	Phe	Gln	Ala	Val	Arg	Val	Asp	His	Ala	Thr	Ala	Phe	Ala
145				150					155					160	

Arg

<210> 721

<211> 579

<212> DNA

<213> Homo sapiens

<400> 721

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 120
 aggaacgctc tcagggtggc tgaagtctgg atggatgaat ttaaaagcca cgtctactgg
 180
 catggaacat accaggagga ctcaggaatt gacattgggg acatcactgc aaggaaggct
 240

ctcaggaaac agctgcagtg caagaccttc cgggtggtacc tggtcagcgt gtacccagag
 300
 atgaggatgt actccgacat cattgcctat ggagtgtctgc agaattctct gaagactgat
 360
 ttgtgtcttg accaggggcc agatacagag aatgtcccca tcatgtacat ctgccatggg
 420
 atgacgcctc agaacgtgta ctacacgagc agtcagcaga tccatgtggg cattctgagc
 480
 cccaccgtgg atgatgatga caaccgatgc ctggtgggacg tcaacagccg gccccggctc
 540
 atcgaatgca gctacgcaa agccaagagg atgaagctt
 579

<210> 722

<211> 193

<212> PRT

<213> Homo sapiens

<400> 722

Lys	Leu	Gly	Ile	Arg	Val	Trp	Gln	Cys	Gly	Gly	Ser	Val	Glu	Val	Leu
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Pro	Cys	Ser	Arg	Ile	Ala	His	Ile	Glu	Arg	Ala	His	Lys	Pro	Tyr	Thr
			20					25					30		
Glu	Asp	Leu	Thr	Ala	His	Val	Arg	Arg	Asn	Ala	Leu	Arg	Val	Ala	Glu
		35					40					45			
Val	Trp	Met	Asp	Glu	Phe	Lys	Ser	His	Val	Tyr	Trp	His	Gly	Thr	Tyr
	50					55					60				
Gln	Glu	Asp	Ser	Gly	Ile	Asp	Ile	Gly	Asp	Ile	Thr	Ala	Arg	Lys	Ala
65					70					75				80	
Leu	Arg	Lys	Gln	Leu	Gln	Cys	Lys	Thr	Phe	Arg	Trp	Tyr	Leu	Val	Ser
			85						90					95	
Val	Tyr	Pro	Glu	Met	Arg	Met	Tyr	Ser	Asp	Ile	Ile	Ala	Tyr	Gly	Val
			100					105					110		
Leu	Gln	Asn	Ser	Leu	Lys	Thr	Asp	Leu	Cys	Leu	Asp	Gln	Gly	Pro	Asp
		115					120					125			
Thr	Glu	Asn	Val	Pro	Ile	Met	Tyr	Ile	Cys	His	Gly	Met	Thr	Pro	Gln
		130				135					140				
Asn	Val	Tyr	Tyr	Thr	Ser	Ser	Gln	Gln	Ile	His	Val	Gly	Ile	Leu	Ser
145					150					155				160	
Pro	Thr	Val	Asp	Asp	Asp	Asn	Arg	Cys	Leu	Val	Asp	Val	Asn	Ser	
			165					170					175		
Arg	Pro	Arg	Leu	Ile	Glu	Cys	Ser	Tyr	Ala	Lys	Ala	Lys	Arg	Met	Lys
			180					185					190		

Leu

<210> 723

<211> 384

<212> DNA

<213> Homo sapiens

<400> 723

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 120
 cgcggaagggg attaccaaat gcgcattgat acgcgctccg gaacgcctac gctgatgctt
 180
 accgtacaaa gtgtaaccga caaacctgtt acggacgtca ctcgacaatg tcctaaatgg
 240
 gacggcaagc ccctcaccct tgacgtaacg aatacattcc cggaaggctc cgctcgtaaga
 300
 gacttctaca gcaagcaaac cgctatgggtg cagcaaggta aaatcacact tcagcctggc
 360
 gctaacagca atggcctgct gctg
 384

<210> 724
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 724
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 1 5 10 15
 Glu Ala Val Lys Leu Asn Glu Met Leu Ser Leu Lys Pro Cys Glu Gly
 20 25 30
 Thr Pro Pro Gln Trp Arg Leu Phe Arg Glu Gly Asp Tyr Gln Met Arg
 35 40 45
 Ile Asp Thr Arg Ser Gly Thr Pro Thr Leu Met Leu Thr Val Gln Ser
 50 55 60
 Val Thr Asp Lys Pro Val Thr Asp Val Thr Arg Gln Cys Pro Lys Trp
 65 70 75 80
 Asp Gly Lys Pro Leu Thr Leu Asp Val Thr Asn Thr Phe Pro Glu Gly
 85 90 95
 Ser Val Val Arg Asp Phe Tyr Ser Lys Gln Thr Ala Met Val Gln Gln
 100 105 110
 Gly Lys Ile Thr Leu Gln Pro Ala Ala Asn Ser Asn Gly Leu Leu Leu
 115 120 125

<210> 725
 <211> 521
 <212> DNA
 <213> Homo sapiens

<400> 725
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 120
 gaaaataggt ttccttcttc cacaggcatg gagaaggaag gaaattttgc actggccttt
 180
 gggaagctga agaagagctg gggggaggct tgttctgaca aaatagtgac tctctccctg
 240
 cttgaaatgt ccacagaag gctgtttctg gttcacattt gccctctag gtccactccc
 300
 tccccttcat cctgctcact gccagagaga ctatgctggg agtgggtgcat cggtggtctc
 360

caggcccttt taggetcaag gtgttcattc cctggctcct tccctgccat gtctttgttc
 420
 ctctctcct ccttcccatc ccagcagcca cctctctcct tccaccagac ctgggaacca
 480
 tcattcccaac cacaatcacc ccgtggttct attacacgcg t
 521

<210> 726

<211> 124

<212> PRT

<213> Homo sapiens

<400> 726

Met	Glu	Lys	Glu	Gly	Asn	Phe	Ala	Leu	Ala	Phe	Gly	Lys	Leu	Lys	Lys
1				5				10					15		
Ser	Trp	Gly	Glu	Ala	Cys	Ser	Asp	Lys	Ile	Val	Thr	Leu	Ser	Leu	Leu
		20						25				30			
Glu	Met	Ser	His	Arg	Arg	Leu	Phe	Leu	Val	His	Ile	Cys	Pro	Ser	Arg
		35				40						45			
Ser	Thr	Pro	Ser	Pro	Ser	Ser	Cys	Ser	Leu	Pro	Glu	Arg	Leu	Cys	Trp
	50				55						60				
Glu	Trp	Cys	Ile	Gly	Gly	Leu	Gln	Ala	Leu	Leu	Gly	Ser	Arg	Cys	Ser
65				70					75					80	
Phe	Pro	Gly	Ser	Phe	Pro	Ala	Met	Ser	Leu	Phe	Leu	Pro	Pro	Ser	Phe
			85					90						95	
Pro	Ser	Gln	Gln	Pro	Pro	Ser	Ser	Phe	His	Gln	Thr	Trp	Glu	Pro	Ser
		100						105					110		
Ser	Gln	Pro	Gln	Ser	Pro	Arg	Gly	Ser	Ile	Thr	Arg				
		115					120								

<210> 727

<211> 629

<212> DNA

<213> Homo sapiens

<400> 727

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 120
 tgccattatc gacgctgggt agtgaaggc tccgacgcat cgggcgtttg cgtcaatcag
 180
 tgccgccccg cagaggtcc aaggagaact cgaatgaatc cgaatgacta cctggtgctc
 240
 tcggcgatct tgttcgctat cggcatcgtg ggcttcctga cgaggcgtaa tgccctgggtg
 300
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 360
 cagtacacg gctctctcga cggacaggtc ggggttttct tcgtgatgat cgtggcagcc
 420
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 480
 tcgggtggacg acaccaacct gctgaagttc tgaggggaggt accgtgactg tcttggaaac
 540

cggtctgttc aacgtggcct ggctcatgat tgcggtgccca ctggtggttg ccgcgctgct
 600
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 629

<210> 728
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 728
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 Gly Ile Val Gly Phe Leu Thr Arg Arg Asn Ala Leu Val Ala Phe Met
 20 25 30
 Ser Val Glu Leu Met Leu Asn Ala Ala Asn Leu Ala Leu Val Thr Phe
 35 40 45
 Ala His Val His Gly Ser Leu Asp Gly Gln Val Gly Val Phe Phe Val
 50 55 60
 Met Ile Val Ala Ala Ala Glu Val Val Val Gly Leu Ala Ile Ile Val
 65 70 75 80
 Thr Ile Phe Arg Ser Arg Arg Thr Thr Ser Val Asp Asp Thr Asn Leu
 85 90 95
 Leu Lys Phe

<210> 729
 <211> 4716
 <212> DNA
 <213> Homo sapiens

<400> 729
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 ttaaggaaat gctgcaggac agggaatccc aaaatcaaaa gtctacagtt ccgtcaagaa
 120
 ggagaatgta ttcttttgat gatgtgctgg aggaaggaaa ggcaccccct acaatgactg
 180
 tgtcagaagc aagttaccag agtgagagag tagaagagaa gggagcaact tattcttcag
 240
 aaattcccaa agaagattct accacttttg caaaaagaga ggaccctgtt aacaactgaa
 300
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 360
 cgttcacgga gcacacaaat ggaatcaact cgtgtttcag cttctctccc cagaagttac
 420
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 480
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 540
 ggagatgttg aagacattaa gagaactcca aacaatgttg tcagcaccct tgcaccaagc
 600
 ccggacgcaa gccaaactggc ttcaagctta tctagccaga aagaggtagc agcaacagaa
 660

gaagatgtga caaggetgcc ctctcctaca tcccccttct catctcttcc ccaagaccag
720
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780
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840
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1320
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2160
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2280

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 2460
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 2520
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 2760
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 3060
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 3840
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 3900

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 3960
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 4200
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 4260
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 4320
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 4380
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 4440
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 4500
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 4560
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 4620
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 4680
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 4716

<210> 730

<211> 797

<212> PRT

<213> Homo sapiens

<400> 730

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Thr	Asp	Thr	Val	Arg	Leu	Thr	Ser	Val	Val	Thr	Pro	Arg	Pro	Phe	Gly
			20					25					30		
Ser	Gln	Thr	Arg	Gly	Ile	Ser	Ser	Leu	Pro	Arg	Ser	Tyr	Thr	Met	Asp
			35					40				45			
Asp	Ala	Trp	Lys	Tyr	Asn	Gly	Asp	Val	Glu	Asp	Ile	Lys	Arg	Thr	Pro
			50			55					60				
Asn	Asn	Val	Val	Ser	Thr	Pro	Ala	Pro	Ser	Pro	Asp	Ala	Ser	Gln	Leu
65					70					75				80	
Ala	Ser	Ser	Leu	Ser	Ser	Gln	Lys	Glu	Val	Ala	Ala	Thr	Glu	Glu	Asp
				85					90					95	
Val	Thr	Arg	Leu	Pro	Ser	Pro	Thr	Ser	Pro	Phe	Ser	Ser	Leu	Ser	Gln
			100					105					110		
Asp	Gln	Ala	Ala	Thr	Ser	Lys	Ala	Thr	Leu	Ser	Ser	Thr	Ser	Gly	Leu
			115				120					125			
Asp	Leu	Met	Ser	Glu	Ser	Gly	Glu	Gly	Glu	Ile	Ser	Pro	Gln	Arg	Glu
			130				135					140			
Val	Ser	Arg	Ser	Gln	Asp	Gln	Phe	Ser	Asp	Met	Arg	Ile	Ser	Ile	Asn

145					150					155				160
Gln	Thr	Pro	Gly	Lys	Ser	Leu	Asp	Phe	Gly	Phe	Thr	Ile	Lys	Trp
				165					170					175
Ile	Pro	Gly	Ile	Phe	Val	Ala	Ser	Val	Glu	Ala	Gly	Ser	Pro	Ala
			180					185					190	
Phe	Ser	Gln	Leu	Gln	Val	Asp	Asp	Glu	Ile	Ile	Ala	Ile	Asn	Asn
		195					200					205		
Lys	Phe	Ser	Tyr	Asn	Asp	Ser	Lys	Glu	Trp	Glu	Glu	Ala	Met	Ala
	210					215					220			
Ala	Gln	Glu	Thr	Gly	His	Leu	Val	Met	Asp	Val	Arg	Arg	Tyr	Gly
225					230				235					240
Ala	Gly	Ser	Pro	Glu	Thr	Lys	Trp	Ile	Asp	Ala	Thr	Ser	Gly	Ile
				245					250					255
Asn	Ser	Glu	Lys	Ser	Ser	Asn	Leu	Ser	Val	Thr	Thr	Asp	Phe	Ser
			260					265					270	
Ser	Leu	Gln	Ser	Ser	Asn	Ile	Glu	Ser	Lys	Glu	Ile	Asn	Gly	Ile
	275						280					285		
Asp	Glu	Ser	Asn	Ala	Phe	Glu	Ser	Lys	Ala	Ser	Glu	Ser	Ile	Ser
	290					295					300			
Lys	Asn	Leu	Lys	Arg	Arg	Ser	Gln	Phe	Phe	Glu	Gln	Gly	Ser	Ser
305					310					315				320
Ser	Val	Val	Pro	Asp	Leu	Pro	Val	Pro	Thr	Ile	Ser	Ala	Pro	Ser
				325					330					335
Trp	Val	Trp	Asp	Gln	Glu	Glu	Glu	Arg	Lys	Arg	Gln	Glu	Arg	Trp
			340					345					350	
Lys	Glu	Gln	Asp	Arg	Leu	Leu	Gln	Glu	Lys	Tyr	Gln	Arg	Glu	Gln
	355						360				365			
Lys	Leu	Arg	Glu	Glu	Trp	Gln	Arg	Ala	Lys	Gln	Glu	Ala	Glu	Arg
	370					375					380			
Asn	Ser	Lys	Tyr	Leu	Asp	Glu	Glu	Leu	Met	Val	Leu	Ser	Ser	Asn
385					390					395				400
Met	Ser	Leu	Thr	Thr	Arg	Glu	Pro	Ser	Leu	Ala	Thr	Trp	Glu	Ala
				405					410					415
Trp	Ser	Glu	Gly	Ser	Lys	Ser	Ser	Asp	Arg	Glu	Gly	Thr	Arg	Ala
			420					425					430	
Glu	Glu	Glu	Arg	Arg	Gln	Pro	Gln	Glu	Glu	Val	Val	His	Glu	Asp
			435				440					445		
Gly	Lys	Lys	Pro	Gln	Asp	Gln	Leu	Val	Ile	Glu	Arg	Glu	Arg	Lys
	450					455				460				
Glu	Gln	Gln	Leu	Gln	Glu	Glu	Gln	Glu	Gln	Lys	Arg	Leu	Gln	Ala
465					470				475					480
Ala	Glu	Glu	Gln	Lys	Arg	Pro	Ala	Glu	Glu	Gln	Lys	Arg	Gln	Ala
				485					490					495
Ile	Glu	Arg	Glu	Thr	Ser	Val	Arg	Ile	Tyr	Gln	Tyr	Arg	Arg	Pro
			500					505					510	
Asp	Ser	Tyr	Asp	Ile	Pro	Lys	Thr	Glu	Glu	Ala	Ser	Ser	Gly	Phe
	515						520					525		
Pro	Gly	Asp	Arg	Asn	Lys	Ser	Arg	Ser	Thr	Thr	Glu	Leu	Asp	Asp
	530					535					540			
Ser	Thr	Asn	Lys	Asn	Gly	Asn	Asn	Lys	Tyr	Leu	Asp	Gln	Ile	Gly
545					550					555				560
Thr	Thr	Ser	Ser	Gln	Arg	Arg	Ser	Lys	Lys	Glu	Gln	Val	Pro	Ser
				565					570					575
Ala	Glu	Leu	Glu	Arg	Gln	Gln	Ile	Leu	Gln	Glu	Met	Arg	Lys	Arg

```

      580      585      590
Pro Leu His Asn Asp Asn Ser Trp Ile Arg Gln Arg Ser Ala Ser Val
      595      600      605
Asn Lys Glu Pro Val Ser Leu Pro Gly Ile Met Arg Arg Gly Glu Ser
      610      615      620
Leu Asp Asn Leu Asp Ser Pro Arg Ser Asn Ser Trp Arg Gln Pro Pro
      625      630      635      640
Trp Leu Asn Gln Pro Thr Gly Phe Tyr Ala Ser Ser Ser Val Gln Asp
      645      650      655
Phe Ser Arg Pro Pro Pro Gln Leu Val Ser Thr Ser Asn Arg Ala Tyr
      660      665      670
Met Arg Asn Pro Ser Ser Ser Val Pro Pro Pro Ser Ala Gly Ser Val
      675      680      685
Lys Thr Ser Thr Thr Gly Val Ala Thr Thr Gln Ser Pro Thr Pro Arg
      690      695      700
Ser His Ser Pro Ser Ala Ser Gln Ser Gly Ser Gln Leu Arg Asn Arg
      705      710      715      720
Ser Val Ser Gly Lys Arg Ile Cys Ser Tyr Cys Asn Asn Ile Leu Gly
      725      730      735
Lys Gly Ala Ala Met Ile Ile Glu Ser Leu Gly Leu Cys Tyr His Leu
      740      745      750
His Cys Phe Lys Cys Val Ala Cys Glu Cys Asp Leu Gly Gly Ser Ser
      755      760      765
Ser Gly Ala Glu Val Arg Ile Arg Asn His Gln Leu Tyr Cys Asn Asp
      770      775      780
Cys Tyr Leu Arg Phe Lys Ser Gly Arg Pro Thr Ala Met
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<210> 731

<211> 513

<212> DNA

<213> Homo sapiens

<400> 731

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120
tcttcaaagt atgactggg gaaacagatt gttggaaaaa cactttcggg ttgcctcgat
180
ggggtcaata cttatcagg ccacaggaaa gacaaaggaa aatgcttcct gctggagcat
240
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300
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360
tgctccgtgt tgactctttt cccacaaca cggaagctgc ttaatccaaa gacttggacc
420
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513

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<210> 732

<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 732
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 1 5 10 15
 Phe Arg Val Val Gly Lys Arg Val Asn Thr Glu Gln Lys Glu Asn Lys
 20 25 30
 Thr His Thr Lys Trp Trp Gly Thr Gly His Phe Leu Ile Thr His Phe
 35 40 45
 Leu Ile Leu Pro Pro Pro Leu His Thr Tyr Leu Glu Leu Lys Glu Gln
 50 55 60
 His Met Cys Thr Cys Ser Ser Arg Lys His Phe Pro Leu Ser Phe Leu
 65 70 75 80
 Trp Pro Asp Lys Val Leu Thr Pro Ser Arg Gln Pro Glu Ser Val Phe
 85 90 95
 Pro Thr Ile Cys Phe Pro Ser Gln Ser Phe Glu Glu Ser Arg Glu Ala
 100 105 110
 Glu

<210> 733
 <211> 4366
 <212> DNA
 <213> Homo sapiens

<400> 733
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 120
 ggaggcctct tgaagaactc caggcctatc atgctgtctc tccgctaaag cctgaggccc
 180
 gaggtcagag gattcaggaa ggctctgcag tcggcccagg agggcggggt cccgtggtgg
 240
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 420
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 780

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 960
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 4366

<210> 734

<211> 364

<212> PRT

<213> Homo sapiens

<400> 734

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			20					25					30		
Ala	His	Ile	Arg	Ala	Ser	Phe	Arg	Asp	Gly	Asp	Pro	Val	His	Arg	His
		35					40				45				
Arg	Gln	Leu	Ala	Lys	Leu	Leu	Tyr	Val	His	Met	Leu	Gly	Tyr	Pro	Ala
		50				55					60				
His	Phe	Gly	Gln	Met	Glu	Cys	Leu	Lys	Leu	Ile	Ala	Ser	Ser	Arg	Phe
65					70					75				80	
Thr	Asp	Lys	Arg	Val	Gly	Tyr	Leu	Gly	Ala	Met	Leu	Leu	Leu	Asp	Glu
			85						90					95	
Arg	His	Asp	Ala	His	Leu	Leu	Ile	Thr	Asn	Ser	Ile	Lys	Asn	Asp	Leu
			100					105					110		
Ser	Gln	Gly	Ile	Gln	Pro	Val	Gln	Gly	Leu	Ala	Leu	Cys	Thr	Leu	Ser
		115					120					125			
Thr	Met	Gly	Ser	Ala	Glu	Met	Cys	Arg	Asp	Leu	Ala	Pro	Glu	Val	Glu
		130				135				140					
Lys	Leu	Leu	Leu	Gln	Pro	Ser	Pro	Tyr	Val	Arg	Lys	Lys	Ala	Ile	Leu
145				150						155				160	
Thr	Ala	Val	His	Met	Ile	Arg	Lys	Val	Pro	Glu	Leu	Ser	Ser	Val	Phe
			165					170						175	
Leu	Pro	Pro	Cys	Ala	Gln	Leu	Leu	His	Glu	Arg	His	His	Gly	Ile	Leu
			180					185					190		
Leu	Gly	Thr	Ile	Thr	Leu	Ile	Thr	Glu	Leu	Cys	Glu	Arg	Ser	Pro	Ala
		195					200					205			
Ala	Leu	Arg	His	Phe	Arg	Lys	Val	Val	Pro	Gln	Leu	Val	His	Ile	Leu
		210				215					220				
Arg	Thr	Leu	Val	Thr	Met	Gly	Tyr	Ser	Thr	Glu	His	Ser	Ile	Ser	Gly
225					230					235				240	
Val	Ser	Asp	Pro	Phe	Leu	Gln	Val	Gln	Ile	Leu	Arg	Leu	Leu	Arg	Ile
				245					250					255	
Leu	Gly	Arg	Asn	His	Glu	Glu	Ser	Ser	Glu	Thr	Met	Asn	Asp	Leu	Leu
			260					265					270		
Ala	Gln	Val	Ala	Thr	Asn	Thr	Asp	Thr	Ser	Arg	Asn	Ala	Gly	Asn	Ala

275		280		285
Val Leu Phe Glu Thr	Val Leu Thr Ile Met Asp	Ile Arg Ser Ala Ala		
290	295	300		
Gly Leu Arg Val Leu Ala	Val Asn Ile Leu Gly Arg Phe Leu Leu Asn			
305	310	315	320	
Ser Asp Arg Asn Ile Arg Tyr Val Ala Leu Thr Ser Leu Leu Arg Leu				
	325	330	335	
Val Gln Ser Asp His Ser Ala Val Gln Arg His Arg Pro Thr Val Val				
	340	345	350	
Glu Cys Leu Arg Glu Thr Asp Ala Ser Leu Ser Arg				
355	360			

<210> 735
 <211> 597
 <212> DNA
 <213> Homo sapiens

<400> 735
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 120
 tgcttggtgt cctcgatccc gctctgaccg cccactggac cgctcaaccc aggacatcct
 180
 cagtgccatc cacgacgtgg ctgcaccgct ggcaactacc atcttcgtgg tgggtgccac
 240
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 360
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 420
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 480
 gccagccacc atcaaattggc cgcccgacat ggctgtcatg atgaatgttg ctggctacgc
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 597

<210> 736
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 736
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 Ile Ala Trp Cys Pro Arg Ser Arg Ser Asp Arg Pro Leu Asp Arg Ser
 20 25 30
 Thr Gln Asp Ile Leu Ser Ala Ile His Asp Val Ala Ala Pro Leu Ala
 35 40 45
 Leu Pro Ile Phe Val Val Gly Ala Thr Ala Arg Asp Ile Leu Leu Thr
 50 55 60
 His Val Phe Gly Ile Glu Thr Gly Arg Ala Thr Leu Asp Val Asp Phe

```

65              70              75              80
Ala Val Ala Val Glu His Trp Pro Gln Phe Glu Asn Ile Lys Gln His
              85              90              95
Leu Leu Ala Asn Asp His Phe Asp Ser Ala Ala Ser Ile Thr His Arg
              100             105             110
Leu Leu Tyr Arg Thr Ser Asp Asn Thr Ile Ala Arg Pro Ile Asp Leu
              115             120             125
Ile Pro Phe Gly Gly Ile Glu Gln Pro Pro Ala Thr Ile Lys Trp Pro
              130             135             140
Pro Asp Met Ala Val Met Met Asn Val Ala Gly Tyr Ala Asp Ala Trp
145              150              155              160
Arg Ala Ala Val Glu Val Glu Phe Val Pro Gly Arg Ser Ile Arg
              165              170              175

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<210> 737

<211> 497

<212> DNA

<213> Homo sapiens

<400> 737

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120
caccctgccc tgtcctggat cagccacgtc accttcgtta aaactgtcag tgtgggggat
180
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240
gtcgggttacg ccgacggact gtcccgagga ctgtcaaata aaggacacgt tctcattaga
300
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360
cccgattcga acgtcacggg gggagatgag gtggtgctca ttggaaccca ggaggacgaa
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gccatttcca aacgcgt
497

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<210> 738

<211> 165

<212> PRT

<213> Homo sapiens

<400> 738

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Thr Ser Met Val Arg Ala Gly Ile Val Gly Tyr Gly Tyr Asp Pro Asn
              20              25              30
Pro His Ala Asp Arg Ala Asp Leu His Pro Ala Leu Ser Trp Ile Ser
              35              40              45
His Val Thr Phe Val Lys Thr Val Ser Val Gly Asp Thr Ile Gly Tyr
              50              55              60
Gly Arg Thr Trp Thr Ala Ser Glu Thr Thr Lys Ile Ala Thr Val Pro

```

```

65          70          75          80
Val Gly Tyr Ala Asp Gly Leu Ser Arg Gly Leu Ser Asn Lys Gly His
          85          90          95
Val Leu Ile Arg Gly Ser Val His Pro Ile Val Gly Arg Ile Cys Met
          100          105          110
Asp Gln Phe Met Val Asp Leu Gly Pro Asp Ser Asn Val Thr Val Gly
          115          120          125
Asp Glu Val Val Leu Ile Gly Thr Gln Glu Asp Glu Thr Leu Thr Ala
          130          135          140
Asp Asp Met Ala Glu Leu Leu Gly Thr Ile Ser Tyr Glu Ile Thr Cys
145          150          155          160
Ala Ile Ser Lys Arg
          165

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<210> 739
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<400> 739
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120
cagagcagcg gggaggagga gctgcagctc cagctggccc tggccatgag caaggaggag
180
gccgaccagc ccccgctctg cggccccgag gacgacgcc agctccagct ggcccttagt
240
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438

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<210> 740
 <211> 146
 <212> PRT
 <213> Homo sapiens

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<400> 740
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Ala Gln Thr Ala Thr Ala Ser Ser Ala Ala Val Gly Ser Gly Pro Pro
20      25      30
Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu Leu
35      40      45
Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp Gln Pro
50      55      60
Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln Leu Gln Leu Ala Leu Ser
65      70      75      80
Leu Ser Arg Glu Glu His Asp Lys Glu Glu Arg Ile Arg Arg Gly Asp

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```

      35              40              45
Asp Glu His Pro Ala Glu Ile Ile Asn Thr Asp Ser Met Val Val Tyr
  50              55              60
Arg Gly Met Asp Ile Gly Thr Ala Thr Pro Thr Leu Arg Glu Gln Arg
  65              70              75              80
Thr Val Val His His Leu Val Ser Ile Leu Asp Val Thr Val Pro Ser
      85              90              95
Ser Leu Val Leu Met Gln Thr Leu Ala Arg Asp Ala Val Glu Asp Cys
      100             105             110
Leu Ser Arg Gly Val Ile Pro Val Leu Val Gly Gly Ser Ala Leu Tyr
      115             120             125
Thr Lys Ala Ile Ile Asp Glu Met Ser Ile Pro Pro Thr Asp Pro Glu
      130             135             140
Val Arg Ala Arg Trp Gln Glu Lys Leu Asp Ala Glu Gly Pro Arg Val
      145             150             155             160
Leu His Asp Glu Leu Ala Arg Arg Asp Pro Lys Ala Ala Glu Ser Ile
      165             170             175
Leu Pro Gly Asn Gly Arg Arg Ile Val Ser Cys Pro Arg Ser Leu Leu
      180             185             190
Thr Leu Thr Gly Ser Phe Thr Ala Thr Asp Pro Arg Arg Asp Pro Pro
      195             200             205
Leu Ala Lys Thr Val Gln Met Gly Leu Glu Leu Ser Arg Lys Asp Ile
      210             215             220
Asp Gln Arg Ile Ala Asp Arg Val Asp Gln Met Trp Ala Tyr Gly Phe
      225             230             235             240
Val Asp

```

<210> 743

<211> 430

<212> DNA

<213> Homo sapiens

<400> 743

```

naaaaaagtg atggttttcgg atctgtggcc agtcgtcttg caagaaatca ttatgacgtg
  60
gatgagggca acagcancat tcatgttaat caagacattg cgcgcagaac agggacggga
  120
aagctatttg tacgagtgtg cccggcgcac gtgtactcag aggagcccga tggcactatt
  180
tccgtggagt acgcagcgtg tctggagtgt ggcacttgtc tggcggttgc tgcgccaggg
  240
tcgcttgaat ggcactatcc cgcaggtgca atgggtatatt cgttcagaga aggatgaagt
  300
ccttggtggc gactgtaaag cgacatggcc gtcgctcggg aggaggaatt gtggtgtccg
  360
caccaaatag tgctcaggat gaagttcgtc atggaaatcc ggctccaacc gtttcggggag
  420
ctggtcgcga
  430

```

<210> 744

<211> 98

<212> PRT

<213> Homo sapiens

<400> 744

```

Xaa Lys Ser Asp Gly Phe Gly Ser Val Ala Ser Arg Leu Ala Arg Asn
 1             5             10             15
His Tyr Asp Val Asp Glu Gly Asn Ser Xaa Ile His Val Asn Gln Asp
             20             25             30
Ile Ala Arg Arg Thr Gly Thr Gly Lys Leu Leu Val Arg Val Cys Pro
             35             40             45
Ala His Val Tyr Ser Glu Glu Pro Asp Gly Thr Ile Ser Val Glu Tyr
             50             55             60
Ala Ala Cys Leu Glu Cys Gly Thr Cys Leu Ala Val Ala Ala Pro Gly
65             70             75             80
Ser Leu Glu Trp His Tyr Pro Ala Gly Ala Met Gly Ile Ser Phe Arg
             85             90             95
Glu Gly

```

<210> 745

<211> 362

<212> DNA

<213> Homo sapiens

<400> 745

```

cggccgattg aagcgctcgt gcggtttgag tcggtgatgg atgcggtgga cggcgcttcg
60
gcgtcgtggt ggcgcatggc gcggtatttc atcgccgagc ttgaacgcag cagcgagttg
120
tatgagcagg cggcgtttac ccgcgatctg gaaagctcgc tgatcaaggg cctgacctc
180
gccagccga acaactactc cgaagaactg cgcgacgtac tcggcgtgaa gctgccgcat
240
tacttgattc gcgcgcggca gtacatccac gacaacgccc gcgaagccgt gcattctggaa
300
gacctggaaa ccgctgccgg ggtatcgcgg ttcaagttgt tcgatgcgtt tcgcaaatac
360
tt
362

```

<210> 746

<211> 108

<212> PRT

<213> Homo sapiens

<400> 746

```

Met Asp Ala Val Asp Gly Ala Ser Ala Ser Trp Trp Arg Met Ala Arg
 1             5             10             15
Tyr Phe Ile Ala Glu Leu Glu Arg Ser Ser Glu Leu Tyr Glu Gln Ala
             20             25             30
Ala Phe Thr Arg Asp Leu Glu Ser Ser Leu Ile Lys Gly Leu Ile Leu
             35             40             45
Ala Gln Pro Asn Asn Tyr Ser Glu Glu Leu Arg Asp Val Leu Gly Val
50             55             60
Lys Leu Pro His Tyr Leu Ile Arg Ala Arg Gln Tyr Ile His Asp Asn

```

```

65              70              75              80
Ala Arg Glu Ala Val His Leu Glu Asp Leu Glu Thr Ala Ala Gly Val
              85              90              95
Ser Arg Phe Lys Leu Phe Asp Ala Phe Arg Lys Tyr
              100              105

```

```

<210> 747
<211> 416
<212> DNA
<213> Homo sapiens

```

```

<400> 747
nagcggttga tcgccgcgga ccgtttcatc ccgcaatcac ccgacatggc ggcctatattt
60
ctgaatgccg atggcacgcc taaagccacc ggcacgctgc tcaagaaccc agcgctggcc
120
gccgtgttca aacgtatcgc caaggaagga cgggacgcgc tgtaccacgg gccgattgcc
180
gacgagatcg cgcgcaaggt tcagggcaac cgcaatgcgg gcagcctgtc gcaagcggac
240
ctcaaggctt acaccgccaa ggaacgcacg ccgctgtgca ccgactacaa gcaatatcag
300
gtgtgcggca tgccaccgcc gtcgtcaggc gggattgcgg tggcgcagat ctcgggcacg
360
ctgcaggccg tggaagcccg cgacccaagc ctggccatcg ccccatgaa accggt
416

```

```

<210> 748
<211> 138
<212> PRT
<213> Homo sapiens

```

```

<400> 748
Xaa Ala Leu Ile Ala Ala Asp Arg Phe Ile Pro Gln Ser Pro Asp Met
1      5      10      15
Ala Ala Tyr Phe Leu Asn Ala Asp Gly Thr Pro Lys Ala Thr Gly Thr
20     25     30
Leu Leu Lys Asn Pro Ala Leu Ala Ala Val Phe Lys Arg Ile Ala Lys
35     40     45
Glu Gly Pro Asp Ala Leu Tyr His Gly Pro Ile Ala Asp Glu Ile Ala
50     55     60
Arg Lys Val Gln Gly Asn Arg Asn Ala Gly Ser Leu Ser Gln Ala Asp
65     70     75     80
Leu Lys Ala Tyr Thr Ala Lys Glu Arg Thr Pro Leu Cys Thr Asp Tyr
85     90     95
Lys Gln Tyr Gln Val Cys Gly Met Pro Pro Pro Ser Ser Gly Gly Ile
100    105    110
Ala Val Ala Gln Ile Leu Gly Thr Leu Gln Ala Val Glu Ala Arg Asp
115    120    125
Pro Arg Leu Ala Ile Ala Pro Met Lys Pro
130    135

```

```

<210> 749
<211> 1211

```

<212> DNA

<213> Homo sapiens

<400> 749

nagtcctaga cgccagaccc gctcagaccc tctgcccagg tgacagccgc caagatgggg
60
tcttggggccc tgctgtggcc tcccctgctg ttcaccgggc tgctcgcccg acccccgggg
120
accatggccc aggcccagta ctgctctgtg aacaaggaca tctttgaagt agaggagaac
180
acaaatgtca ccgagccgct ggtggacatc cacgtcccgg agggccagga ggtgaccctc
240
ggagccttgt ccaccccctt tgcatttcgg atccaggga accagctgtt tctcaacgtg
300
actcctgatt acgaggagaa gtcaactgctt gaggctcagc tgctgtgtca gagcggaggc
360
acattgggtga ccagcctaag ggtgttcgtg tcagtgtctg acgtcaatga caatgcccc
420
gaattccctt ttaagaccaa ggagataagg gtggaggagg acacgaaagt gaactccacc
480
gtcatccccg agacgcaact gcaggctgag gaccgcgaca aggacgacat tctgtttctac
540
accctccagg aaatgacagc aggtgccagt gactacttct ccctggtgag tgtaaaccgt
600
ccgcctccta ggctggaccg gcccttggaac ttctacgagc ggccgaacat gaccttctgg
660
ctgctggtgc gggacactcc gggggagaat gtggaacca gccacactgc caccgccaca
720
ctagtgtctga acgtggtgcc cgccgacctg cggcccccggt ggttcctgcc ctgcaccttc
780
tcagatggct acgtctgcat tcaagctcag taccacgggg ctgtccccac ggggcacata
840
ctgccatctc ccctcgtcct gcgtcccga cccatctacg ctgaggacgg agaccgcggc
900
atcaaccagc ccatcatcta cagcatcttt aggggaaacg tgaatggtac attcatcatc
960
caccagact cgggcaacct caccgtggcc aggagtgtcc ccagccccat gaccttcctt
1020
ctgctggtga agggccaaca ggccgacctt gcccgctact cagtgaacca ggtcacctgt
1080
gagggtctgt gctgcggccg ggagcccgcc ccgcttcccc cagagcctgt atcgtggcac
1140
cgtggcgctg ggcgctggag cgggcgttgt ggtcaaggat gcagctgccc cttttcagcc
1200
tctgaggatc c
1211

<210> 750

<211> 385

<212> PRT

<213> Homo sapiens

<400> 750

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu

1	5	10	15
Leu Val Arg Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val			
20	25	30	
Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro			
35	40	45	
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala			
50	55	60	
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu			
65	70	75	80
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu			
85	90	95	
Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val			
100	105	110	
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr			
115	120	125	
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile			
130	135	140	
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu			
145	150	155	160
Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser			
165	170	175	
Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp			
180	185	190	
Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr			
195	200	205	
Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val			
210	215	220	
Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys			
225	230	235	240
Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala			
245	250	255	
Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly			
260	265	270	
Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile			
275	280	285	
Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro			
290	295	300	
Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr			
305	310	315	320
Phe Leu Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser			
325	330	335	
Val Thr Gln Val Thr Val Glu Gly Cys Gly Cys Gly Arg Glu Pro Ala			
340	345	350	
Pro Leu Pro Pro Glu Pro Val Ser Trp His Arg Gly Ala Trp Arg Trp			
355	360	365	
Ser Gly Arg Cys Gly Gln Gly Cys Ser Cys Pro Phe Ser Ala Ser Glu			
370	375	380	
Asp			
385			

<210> 751

<211> 345

<212> DNA

<213> Homo sapiens

<400> 751
 cgcgctcgcg tcacgtcaca cgacatgagc gaggtcaaca tcgacgcggc gctgggtggcg
 60
 gcaggcgggc ggctgtcgcg caccgaggag aagctcgtcg agatgtcgaa cggctgcac
 120
 tgctgcacgc tgcgcgacga cctgatgcag gaagtggcga gactggcggg cgaaggccgc
 180
 ttcgatgcgc tggtcacga gagcaccggc gtgtccgagc cgatgccggc cgccgccacg
 240
 ttcgatttcc gtgaccagga cggcgtctcg ctgcgccgacg tcgcgcggct ggataccatg
 300
 gtaccgcgc tcgacgcgc gtccttcctg cgcgactacg gctcg
 345

<210> 752
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 752
 Arg Val Ala Val Ile Val Asn Asp Met Ser Glu Val Asn Ile Asp Ala
 1 5 10 15
 Ala Leu Val Ala Ala Gly Gly Gly Leu Ser Arg Thr Glu Glu Lys Leu
 20 25 30
 Val Glu Met Ser Asn Gly Cys Ile Cys Cys Thr Leu Arg Asp Asp Leu
 35 40 45
 Met Gln Glu Val Ala Arg Leu Ala Gly Glu Gly Arg Phe Asp Ala Leu
 50 55 60
 Val Ile Glu Ser Thr Gly Val Ser Glu Pro Met Pro Val Ala Ala Thr
 65 70 75 80
 Phe Asp Phe Arg Asp Gln Asp Gly Val Ser Leu Ala Asp Val Ala Arg
 85 90 95
 Leu Asp Thr Met Val Thr Val Val Asp Ala Ala Ser Phe Leu Arg Asp
 100 105 110
 Tyr Gly Ser
 115

<210> 753
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 753
 gcgcgccagt acgccaagac cgtccgcaag gaccgcaagg gcgaacggcg gcgtcggggc
 60
 gcgtcggact agtccacgat gcatccgaac cgcgccttcc gctttgccga tgatgtctcg
 120
 atgctcgatt tcgcggccaa gcgagccttt gcgcacatct tcgtgagcac gcccgagggg
 180
 cctatggtag cgcattcccc ggttaccccc ttgcacggag ccttcgcgtt ccatgtcgcg
 240
 cgcggcaatc ggatcgcgcg gcacctggat ggcgcgacgc tgctgctcag catcagcgcg
 300

accgacggct atatcagccc gagctgggtac gccgaccgc agggaccaca gt
352

<210> 754

<211> 91

<212> PRT

<213> Homo sapiens

<400> 754

Met	His	Pro	Asn	Arg	Ala	Phe	Arg	Phe	Ala	Asp	Asp	Val	Ser	Met	Leu
1				5					10					15	
Asp	Phe	Ala	Ala	Lys	Arg	Ala	Phe	Ala	His	Ile	Phe	Val	Ser	Thr	Pro
			20					25					30		
Glu	Gly	Pro	Met	Val	Ala	His	Ala	Pro	Val	Thr	Pro	Phe	Asp	Gly	Ala
			35				40					45			
Phe	Arg	Phe	His	Val	Ala	Arg	Gly	Asn	Arg	Ile	Ala	Arg	His	Leu	Asp
	50					55				60					
Gly	Ala	Thr	Leu	Leu	Leu	Ser	Ile	Ser	Ala	Thr	Asp	Gly	Tyr	Ile	Ser
65				70						75				80	
Pro	Ser	Trp	Tyr	Ala	Asp	Pro	Gln	Gly	Pro	Gln					
				85						90					

<210> 755

<211> 301

<212> DNA

<213> Homo sapiens

<400> 755

tgggatgcag ggtctttctt ctccaaggat ttcattcctg gagggagaaa agggccccag
60
ctgtctgcc a tcaaaccggg ttgccgggct ggagctcctc ccaggcccgt gtgaggaaga
120
gcaaaggccg gcaggggctc gatgggacca gtcgctcgct caggcccagg aaaaccacac
180
agctgggggc tgtcaggatt ggaccagggt caggccggcc aggcgatggc gggaaaagca
240
ggcccactct gcagacctca atgtctcagg tgcactgcag ggcaaccccg cctaccccg
300
g
301

<210> 756

<211> 99

<212> PRT

<213> Homo sapiens

<400> 756

Met	Gln	Gly	Leu	Ser	Ser	Pro	Arg	Ile	Ser	Phe	Leu	Glu	Gly	Glu	Lys
1				5					10					15	
Gly	Pro	Ser	Cys	Leu	Pro	Ser	Asn	Arg	Val	Ala	Gly	Leu	Glu	Leu	Leu
			20					25					30		
Pro	Gly	Pro	Cys	Glu	Glu	Glu	Gln	Arg	Pro	Ala	Gly	Ala	Arg	Trp	Asp
			35				40					45			
Gln	Ser	Leu	Ala	Gln	Ala	Gln	Glu	Asn	His	Thr	Ala	Gly	Gly	Cys	Gln

```

      50              55              60
Asp Trp Thr Arg Val Arg Pro Ala Arg Arg Trp Arg Glu Lys Gln Ala
65              70              75              80
His Ser Ala Asp Leu Asn Val Ser Gly Ala Leu Gln Gly Asn Pro Ala
      85              90              95
Tyr Pro Gly

```

<210> 757
 <211> 311
 <212> DNA
 <213> Homo sapiens

```

<400> 757
actgaggcga tcgccagagg ggtgggcgtg cgagggtgc tcaacatcca gttcgccctg
60
gtctccgatg ttctctacgt catcgaggcc aaccccaggg catcgcgcac agtccccctc
120
gtctcaaagg catccggcgt gcagctcgcc aaagcggcgg ccctcatcat gacaggggag
180
acgatcgccg cgctcaggcg ctccggccac ctgcccaggg ccgacgcccgc cgtcaccgat
240
cccgatgacc cgatcgccgt caaggaggcg gtccctaccct tcaaacgatt ccgcaccacc
300
gagggacgcg t
311

```

<210> 758
 <211> 103
 <212> PRT
 <213> Homo sapiens

```

<400> 758
Thr Glu Ala Ile Ala Arg Gly Val Gly Val Arg Gly Leu Leu Asn Ile
1      5      10      15
Gln Phe Ala Leu Val Ser Asp Val Leu Tyr Val Ile Glu Ala Asn Pro
      20      25      30
Arg Ala Ser Arg Thr Val Pro Phe Val Ser Lys Ala Ser Gly Val Gln
      35      40      45
Leu Ala Lys Ala Ala Ala Leu Ile Met Thr Gly Glu Thr Ile Ala Ser
      50      55      60
Leu Arg Arg Ser Gly His Leu Pro Glu Ala Asp Ala Ala Val Thr Asp
65      70      75      80
Pro Asp Asp Pro Ile Ala Val Lys Glu Ala Val Leu Pro Phe Lys Arg
      85      90      95
Phe Arg Thr Thr Glu Gly Arg
      100

```

<210> 759
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 759

gtgcacaccg gcaagctggg gtggaactgg gacagcggca acccggacga cactacgccg
 60
 attgccgagg gcaagaccta caccgcaac tcgccgaaca tgtggtccat gttcgccgtc
 120
 gacgaaaaac tcggcatgct ctacctgccg atgggcaacc agaccccgga ccagttcggg
 180
 ggctaccgca cgcctgcgtc ggaactgcac gctgccggcc tgacagcgtc ggatatcgac
 240
 actggtaaag tgcgtgggca ctaccagttc acccaccatg acctgtggga catggacgtg
 300
 ggccggccagc cgagcctgat cgacatcaag accgccgccg gcgtgaaaca agccgtgatg
 360
 gcctcgacca agcaaggcag catctacgcg t
 391

<210> 760

<211> 130

<212> PRT

<213> Homo sapiens

<400> 760

Val	His	Thr	Gly	Lys	Leu	Val	Trp	Asn	Trp	Asp	Ser	Gly	Asn	Pro	Asp
1				5					10					15	
Asp	Thr	Thr	Pro	Ile	Ala	Glu	Gly	Lys	Thr	Tyr	Thr	Arg	Asn	Ser	Pro
			20					25					30		
Asn	Met	Trp	Ser	Met	Phe	Ala	Val	Asp	Glu	Lys	Leu	Gly	Met	Leu	Tyr
		35					40					45			
Leu	Pro	Met	Gly	Asn	Gln	Thr	Pro	Asp	Gln	Phe	Gly	Gly	Tyr	Arg	Thr
	50				55					60					
Pro	Ala	Ser	Glu	Leu	His	Ala	Ala	Gly	Leu	Thr	Ala	Leu	Asp	Ile	Asp
65				70					75					80	
Thr	Gly	Lys	Val	Arg	Trp	His	Tyr	Gln	Phe	Thr	His	His	Asp	Leu	Trp
			85					90					95		
Asp	Met	Asp	Val	Gly	Gly	Gln	Pro	Ser	Leu	Ile	Asp	Ile	Lys	Thr	Ala
			100				105						110		
Ala	Gly	Val	Lys	Gln	Ala	Val	Met	Ala	Ser	Thr	Lys	Gln	Gly	Ser	Ile
		115				120						125			
Tyr	Ala														
	130														

<210> 761

<211> 324

<212> DNA

<213> Homo sapiens

<400> 761

cctaggtagg cccaaagggg cctaactttc ttgctgccct ggtggagcaa gaaatatctt
 60
 ctaggagagg ccaatccttc cctgccccac agctccttct ctgcaaagct caggggggcaa
 120
 tcaggtacct cctgccaag agggcccat ggttcctcgc ctaaggaagg cagggcgggg
 180
 cattgggagc cgttgacagc tgggctcagc tggggggagg ggtcagtttg ggagcaggtg
 240

cagatttcag ggaggggggg gcctaaaggg aagtagggat cttggtaggc tgcaaaattt
 300
 tcctcccat ccccatcca caga
 324

<210> 762
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 762
 Met Gly Asp Gly Glu Glu Asn Phe Ala Ala Tyr Gln Asp Pro Tyr Phe
 1 5 10 15
 Pro Leu Gly Pro Pro Leu Pro Glu Ile Cys Thr Cys Ser Gln Thr Asp
 20 25 30
 Pro Ser Pro Gln Leu Ser Pro Ala Val Asn Gly Ser Gln Cys Pro Ala
 35 40 45
 Leu Pro Ser Leu Gly Glu Glu Pro Trp Gly Pro Leu Gly Gln Glu Val
 50 55 60
 Pro Asp Cys Pro Leu Ser Phe Ala Glu Lys Glu Leu Trp Gly Arg Glu
 65 70 75 80
 Gly Leu Ala Ser Pro Arg Arg Tyr Phe Leu Leu His Gln Gly Ser Lys
 85 90 95
 Lys Val Arg Pro Leu Trp Ala Tyr Leu
 100 105

<210> 763
 <211> 301
 <212> DNA
 <213> Homo sapiens

<400> 763
 acgcgttatg ggcggcccg atgggcgatg cgctatccca cacctcgatg atggcggaca
 60
 tcctcggcgg tgtgctggaa gtggcgccca atatcgcat tactcggggc gcgaccgctg
 120
 ccgcggtggc cgccaccggc tttaccgagg ccaccggcgg cctcggctgc ttctgctgg
 180
 gcgctgcctt gggcaccatt gccggcctgg ccatgagcaa cattggcgcg gacacagggc
 240
 tgaccaagat atgcaatgcc tttacaacg ccttatattgc gcccaccgtg catgcgaaca
 300
 t
 301

<210> 764
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 764
 Met Phe Ala Cys Thr Val Gly Ala Asn Lys Ala Leu Leu Lys Ala Leu
 1 5 10 15
 His Ile Leu Val Ser Pro Val Ser Ala Pro Met Leu Leu Met Ala Arg

```

      20      25      30
Pro Ala Met Val Pro Lys Ala Ala Pro Ser Arg Lys Gln Pro Arg Pro
      35      40      45
Pro Val Ala Ser Val Lys Pro Val Ala Ala Thr Ala Ala Val Ala
      50      55      60
Pro Ala Val Ile Ala Ile Leu Ala Ala Thr Ser Ser Thr Pro Pro Arg
      65      70      75      80
Met Ser Ala Ile Ile Glu Val Trp Asp Ser Ala Ser Pro Ile Arg Ala
      85      90      95
Ala His Asn Ala
      100

```

<210> 765
 <211> 831
 <212> DNA
 <213> Homo sapiens

```

<400> 765
ngcacactcc agcctctgtt ctttctctcc ttgtgccttt gcccttacca cggttcctca
60
taacattggt gttcctgtat ttaaggccct ataaacaggg agatgcgcca cctcatcagt
120
agcctccaga atcacaatca ccagctgaaa ggggaggtcc tgagatataa gcggaaattg
180
agagaagccc agtctgacct gaacaagaca cgctgcgta gtggtagtgc ctcctgcag
240
tcccagtcta gtactgagga cccgaaggat gagcctgcgg agctaaaacc agattctggg
300
gacttatcct cccagtcctc agcttcaaag gcatctcagg aggatgccaa tgaaatcaag
360
tctaaacggg atgaagaaga acgagaacga gaaaggaggg agaaggagag ggaacgagaa
420
agagaacggg agaaggagaa ggagagagaa cgagagaagc agaagctaaa agagtcagaa
480
aaagagagag attctgctaa ggataaagag aaaggcaaac atgatgatgg acggaaaaag
540
gaagcagaaa ttatcaaaca attgaagatt gaactcaaga aggcacagga gagccaaaag
600
gagatgaaac tattgctgga tatgtaccgt tctgccccaa aggaacagag agacaaagtt
660
cagctgatgg cagctgagaa gaagtctaag gcagagttag aagatctaag gcaaagactc
720
aaggatctgg aagataaaga gaagaaagag aacaagaaaa tggctgatga ggatgccttg
780
aggaagatcc gggcagtgga ggagcagata gaatacctac agaagaagct a
831

```

<210> 766
 <211> 243
 <212> PRT
 <213> Homo sapiens

```

<400> 766
Met Arg His Leu Ile Ser Ser Leu Gln Asn His Asn His Gln Leu Lys

```

```

      1             5             10             15
Gly Glu Val Leu Arg Tyr Lys Arg Lys Leu Arg Glu Ala Gln Ser Asp
      20             25             30
Leu Asn Lys Thr Arg Leu Arg Ser Gly Ser Ala Leu Leu Gln Ser Gln
      35             40             45
Ser Ser Thr Glu Asp Pro Lys Asp Glu Pro Ala Glu Leu Lys Pro Asp
      50             55             60
Ser Gly Asp Leu Ser Ser Gln Ser Ser Ala Ser Lys Ala Ser Gln Glu
      65             70             75             80
Asp Ala Asn Glu Ile Lys Ser Lys Arg Asp Glu Glu Glu Arg Glu Arg
      85             90             95
Glu Arg Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Glu Lys Glu
      100             105             110
Lys Glu Arg Glu Arg Glu Lys Gln Lys Leu Lys Glu Ser Glu Lys Glu
      115             120             125
Arg Asp Ser Ala Lys Asp Lys Glu Lys Gly Lys His Asp Asp Gly Arg
      130             135             140
Lys Lys Glu Ala Glu Ile Ile Lys Gln Leu Lys Ile Glu Leu Lys Lys
      145             150             155             160
Ala Gln Glu Ser Gln Lys Glu Met Lys Leu Leu Leu Asp Met Tyr Arg
      165             170             175
Ser Ala Pro Lys Glu Gln Arg Asp Lys Val Gln Leu Met Ala Ala Glu
      180             185             190
Lys Lys Ser Lys Ala Glu Leu Glu Asp Leu Arg Gln Arg Leu Lys Asp
      195             200             205
Leu Glu Asp Lys Glu Lys Lys Glu Asn Lys Lys Met Ala Asp Glu Asp
      210             215             220
Ala Leu Arg Lys Ile Arg Ala Val Glu Glu Gln Ile Glu Tyr Leu Gln
      225             230             235             240
Lys Lys Leu

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<210> 767

<211> 431

<212> DNA

<213> Homo sapiens

<400> 767

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ccccggcacc agaagtctct ctgcgcgtcc gacggcgaca tgggcgtccc cacggccccg
120
gaggccggca gctggcgctg gggatccctg ctcttcgctc tcttcttggc tgcgtcccta
180
ggtccggtgg cagccttcaa ggtcgccacg ccgtattccc tgtatgtctg tcccagagggg
240
cagaacgtca ccctcacctg caggctcttg ggcctgtgg acaaagggca cgatgtgacc
300
ttctacaaga cgtggtaccg cagctcgagg ggcgaggtgc agacctgctc agagcgccgg
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420
aacaccagcc a
431

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<210> 768
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 768
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 Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
 20 25 30
 Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
 35 40 45
 Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
 50 55 60
 Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
 65 70 75 80
 Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
 85 90 95
 Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser
 100 105 110

<210> 769
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 769
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 120
 acggtatggt ttgtatgtcg cggccctgcc actcaaacct caccgtgtca cccacctcaa
 180
 aaaaatcccg ggtcggccca caaataaatc aattgcgcgc ctctccgag ttcttccatg
 240
 tcaacgatct cccctggctg ctcaagccaa ggccctcgcg gccgtgggac tccaagggtg
 300
 acgttgaccc gactgatttc ggaccagttg gcgtcggtat tgggggcagg gtagttaccg
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 420
 an
 422

<210> 770
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 770
 Met Phe Cys Met Ser Arg Pro Cys His Ser Asn Leu Thr Val Ser Pro
 1 5 10 15
 Thr Ser Lys Lys Ser Arg Val Gly Pro Gln Ile Asn Gln Leu Arg Arg

```

                20                25                30
Ser Ser Glu Phe Phe His Val Asn Asp Leu Pro Trp Leu Leu Lys Pro
      35                40                45
Arg Pro Ser Arg Pro Trp Asp Ser Lys Val Asp Val Asp Pro Thr Asp
      50                55                60
Phe Gly Pro Val Gly Val Gly Ile Gly Gly Arg Val Val Thr Ala His
65                70                75                80
Val Asp Asp Leu His Arg His Arg Gln Arg Val Phe Val Val Val Met
      85                90                95
Pro Asp Xaa

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<210> 771
 <211> 369
 <212> DNA
 <213> Homo sapiens

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<400> 771
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gcaatggcgc atcagctggg cggtttttac gatctgccgc acggcgtgtg caatgcgata
120
ctgttgccac acgtgcagac gtttaactgc aaagtggcgg cctcgcgcct gcgtgattgc
180
gcccaggcca tgggtgtcga tgtcagtcaa atgacagcag aacagggcgc acaggcgtgt
240
atcgcagaga ttcgctctct ggcacgtcag gtgaatatcc cggtgggatt gcgtgacctc
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aacgtgaagg aagcggactt cccgattctg gcgaccaacg cgctaaaaga ccctgtgggt
360
ttgattaat
369

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<210> 772
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 772
Ala Tyr Ala Gln Phe Leu Ala Gly Met Ala Phe Asn Asn Ala Ser Leu
1                5                10                15
Gly Tyr Val His Ala Met Ala His Gln Leu Gly Gly Phe Tyr Asp Leu
      20                25                30
Pro His Gly Val Cys Asn Ala Ile Leu Leu Pro His Val Gln Thr Phe
      35                40                45
Asn Cys Lys Val Ala Ala Ser Arg Leu Arg Asp Cys Ala Gln Ala Met
      50                55                60
Gly Val Asp Val Ser Gln Met Thr Ala Glu Gln Gly Ala Gln Ala Cys
65                70                75                80
Ile Ala Glu Ile Arg Ser Leu Ala Arg Gln Val Asn Ile Pro Val Gly
      85                90                95
Leu Arg Asp Leu Asn Val Lys Glu Ala Asp Phe Pro Ile Leu Ala Thr
      100                105                110
Asn Ala Leu Lys Asp Pro Val Gly Leu Ile Asn

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115

120

<210> 773
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 773
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 120
 tccggttccct gccgggattc ggcggtggttg ctggtgcaac tgctgcgcaa cctgggcctg
 180
 gcgggcgcgat ttgtgtctgg ctatctgac caactgaccg ccgacgtcaa agccctcgac
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 300
 cccggcgcc
 309

<210> 774
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 774
 Pro Pro Leu Pro Ala Val Asp Phe Leu Val Gly Leu Asn Gln Arg Leu
 1 5 10 15
 Ala Ala Asp Ile Gly Tyr Leu Ile Arg Val Glu Pro Gly Val Gln Thr
 20 25 30
 Pro Glu Phe Thr Leu Glu Asn Ala Ser Gly Ser Cys Arg Asp Ser Ala
 35 40 45
 Trp Leu Leu Val Gln Leu Leu Arg Asn Leu Gly Leu Ala Ala Arg Phe
 50 55 60
 Val Ser Gly Tyr Leu Ile Gln Leu Thr Ala Asp Val Lys Ala Leu Asp
 65 70 75 80
 Gly Pro Ser Gly Thr Glu Val Asp Phe Thr Asp Leu His Ala Trp Cys
 85 90 95
 Glu Val Tyr Leu Pro Gly Ala
 100

<210> 775
 <211> 4125
 <212> DNA
 <213> Homo sapiens

<400> 775
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 60
 atctcatctg acgtgagttc aagtacagat cacacgccca cttaaagccca gaagaatgtg
 120
 gctaccagcg aagactccga cctgagcatg cgcacactga gcacgcccag cccagccctg
 180

atatgtccac cgaatctccc aggatttcag aatggaagg gctcgtccac ctctcgtcc
 240
 tccatcaccg gggagacggg ggccatgggtg cactccccgc ccccgaccgg cctcacacac
 300
 ccgctcatcc ggctcgccctc cagaccccag aaggatcagg ccagcataga ccggctcccg
 360
 gaccactcca tgggtgcagat cttctccttc ctgcccacca accagctgtg ccgctgcgcg
 420
 cgagtgtgcc gccgctggta caacctggcc tgggaccgcg ggctctggag gactatccgc
 480
 ctgacgggag agaccatcaa cgtggaccgc gccctcaagg tgctgaaccg cagactctgc
 540
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 600
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 660
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 720
 aatctggagc acctggatgt gtcaggatgc tccaaagtga cctgcatcag cttgaccggg
 780
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 1020
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 1440
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 1620
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 1680
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 1740
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 1800

gccctttccc tcgcacacag gccccacccc cacagttcca ccccccccc ccaaggccac
 1860
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 1920
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 1980
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 2040
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 2100
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 2160
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 2280
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 2760
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 2940
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 3780
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 4125

<210> 776

<211> 483

<212> PRT

<213> Homo sapiens

<400> 776

Tyr	Gly	Ser	Glu	Gly	Lys	Gly	Ser	Ser	Ser	Ile	Ser	Ser	Asp	Val	Ser
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Ser	Ser	Thr	Asp	His	Thr	Pro	Thr	Lys	Ala	Gln	Lys	Asn	Val	Ala	Thr
			20					25					30		
Ser	Glu	Asp	Ser	Asp	Leu	Ser	Met	Arg	Thr	Leu	Ser	Thr	Pro	Ser	Pro
		35					40					45			
Ala	Leu	Ile	Cys	Pro	Pro	Asn	Leu	Pro	Gly	Phe	Gln	Asn	Gly	Arg	Gly
		50				55					60				
Ser	Ser	Thr	Ser	Ser	Ser	Ser	Ile	Thr	Gly	Glu	Thr	Val	Ala	Met	Val
65					70					75					80
His	Ser	Pro	Pro	Pro	Thr	Arg	Leu	Thr	His	Pro	Leu	Ile	Arg	Leu	Ala
				85					90					95	
Ser	Arg	Pro	Gln	Lys	Asp	Gln	Ala	Ser	Ile	Asp	Arg	Leu	Pro	Asp	His
			100					105					110		
Ser	Met	Val	Gln	Ile	Phe	Ser	Phe	Leu	Pro	Thr	Asn	Gln	Leu	Cys	Arg
		115					120					125			
Cys	Ala	Arg	Val	Cys	Arg	Arg	Trp	Tyr	Asn	Leu	Ala	Trp	Asp	Pro	Arg
		130				135						140			
Leu	Trp	Arg	Thr	Ile	Arg	Leu	Thr	Gly	Glu	Thr	Ile	Asn	Val	Asp	Arg
145					150					155					160
Ala	Leu	Lys	Val	Leu	Thr	Arg	Arg	Leu	Cys	Gln	Asp	Thr	Pro	Asn	Val
			165					170						175	
Cys	Leu	Met	Leu	Glu	Thr	Val	Thr	Val	Ser	Gly	Cys	Arg	Arg	Leu	Thr

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      180      185      190
Asp Arg Gly Leu Tyr Thr Ile Ala Gln Cys Cys Pro Glu Leu Arg Arg
      195      200      205
Leu Glu Val Ser Gly Cys Tyr Asn Ile Ser Asn Glu Ala Val Phe Asp
      210      215      220
Val Val Ser Leu Cys Pro Asn Leu Glu His Leu Asp Val Ser Gly Cys
      225      230      235      240
Ser Lys Val Thr Cys Ile Ser Leu Thr Arg Glu Ala Ser Ile Lys Leu
      245      250      255
Ser Pro Leu His Gly Lys Gln Ile Ser Ile Arg Tyr Leu Asp Met Thr
      260      265      270
Asp Cys Phe Val Leu Glu Asp Glu Gly Leu His Thr Ile Ala Ala His
      275      280      285
Cys Thr Gln Leu Thr His Leu Tyr Leu Arg Arg Cys Val Arg Leu Thr
      290      295      300
Asp Glu Gly Leu Arg Tyr Leu Val Ile Tyr Cys Ala Ser Ile Lys Glu
      305      310      315      320
Leu Ser Val Ser Asp Cys Arg Phe Val Ser Asp Phe Gly Leu Arg Glu
      325      330      335
Ile Ala Lys Leu Glu Ser Arg Leu Arg Tyr Leu Ser Ile Ala His Cys
      340      345      350
Gly Arg Val Thr Asp Val Gly Ile Arg Tyr Val Ala Lys Tyr Cys Ser
      355      360      365
Lys Leu Arg Tyr Leu Asn Ala Arg Gly Cys Glu Gly Ile Thr Asp His
      370      375      380
Gly Val Glu Tyr Leu Ala Lys Asn Cys Thr Lys Leu Lys Ser Leu Asp
      385      390      395      400
Ile Gly Lys Cys Pro Leu Val Ser Asp Thr Gly Leu Glu Cys Leu Ala
      405      410      415
Leu Asn Cys Phe Asn Leu Lys Arg Leu Ser Leu Lys Ser Cys Glu Ser
      420      425      430
Ile Thr Gly Gln Gly Leu Gln Ile Val Ala Ala Asn Cys Phe Asp Leu
      435      440      445
Gln Thr Leu Asn Val Gln Asp Cys Glu Val Ser Val Glu Ala Leu Arg
      450      455      460
Phe Val Lys Arg His Cys Lys Arg Cys Val Ile Glu His Thr Asn Pro
      465      470      475      480
Ala Phe Phe

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<210> 777

<211> 705

<212> DNA

<213> Homo sapiens

<400> 777

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caccaatctg ctctttaatg ccagactgat ggctctaaca atccttatta actccttttt
120
gtggcttcaa ggaaaaaaaa aaacctcttc tctcattcac cacctctagg ccaggagaaa
180
ttatTTTTTgg ttcaggcttt cacagtgggg gtctgaaagt gaccagtcta gaaaaggatg
240

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actcagcaaa aggagagctc tgaaggtccc tgaggcggca cgggccagca ttattaggtc
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 360
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 420
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 480
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 540
 gccatgcgtc taagggcagc cacatcagtg ggatcactgt tcagagcctg gtgtatctct
 600
 aacactttct ttttcctttt ggcgttaaag tctgccttct ccgcgcgcgc gtcccagtgg
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 705

<210> 778

<211> 134

<212> PRT

<213> Homo sapiens

<400> 778

Met	Ala	Ser	Gly	Val	Arg	Arg	Gly	Arg	Pro	Thr	Ser	Gly	His	Trp	Asp
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Gly	Gly	Ala	Glu	Lys	Ala	Asp	Phe	Asn	Ala	Lys	Arg	Lys	Lys	Lys	Val
			20					25					30		
Leu	Glu	Ile	His	Gln	Ala	Leu	Asn	Ser	Asp	Pro	Thr	Asp	Val	Ala	Ala
		35				40						45			
Leu	Arg	Arg	Met	Ala	Ile	Ser	Glu	Gly	Gly	Leu	Leu	Thr	Asp	Glu	Ile
	50					55					60				
Arg	Arg	Lys	Val	Trp	Pro	Lys	Leu	Leu	Asn	Val	Asn	Ala	Asn	Asp	Pro
65					70					75				80	
Pro	Pro	Ile	Ser	Gly	Lys	Asn	Leu	Arg	Gln	Met	Ser	Lys	Asp	Tyr	Gln
			85					90						95	
Gln	Val	Leu	Leu	Asp	Val	Arg	Arg	Ser	Leu	Arg	Arg	Phe	Pro	Pro	Gly
			100					105					110		
Glu	Lys	Leu	Ser	Arg	Ser	Cys	His	Ile	Trp	Glu	Glu	Arg	Ile	Cys	Phe
		115					120					125			
Arg	Ser	Tyr	His	Val	Thr										
		130													

<210> 779

<211> 322

<212> DNA

<213> Homo sapiens

<400> 779

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 120
 cgccttgccct ttgaaggaac ccagtgggaa ggctagacca agtaaatatg aatcaccaaa
 180

cgccagcaac ttcacgtca ggcatgtggc aactggcaaa gagggcactg atgatgagta
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 tgctaactca aactactact actcgatgtc tgccaatcga ctaggagacg aggaaacgga
 300
 ggaaatgata ggtttggcta cc
 322

<210> 780
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 780
 Met Cys Lys Gln Phe Asn Asp Val Val Arg Arg His Gly Val His His
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 Ser Val Thr Val Ser Asp Ser Glu Asp Thr Val Ala Pro Ser Gln Leu
 20 25 30
 Val Arg Ser Pro Arg Asn Ala Leu Pro Leu Lys Glu Pro Ser Gly Lys
 35 40 45
 Ala Arg Pro Ser Lys Tyr Glu Ser Pro Asn Ala Ser Asn Phe Ile Val
 50 55 60
 Arg His Val Ala Thr Gly Lys Glu Gly Thr Asp Asp Glu Tyr Ala Asn
 65 70 75 80
 Ser Asn Tyr Tyr Tyr Ser Met Ser Ala Asn Arg Leu Gly Asp Glu Glu
 85 90 95
 Thr Glu Glu Met Ile Gly Leu Ala Thr
 100 105

<210> 781
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 781
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 120
 gaatgtgtgt ctgtgtatgg aatatgtgtg agtatnggaa tgtgtgtgtg tgtttggaat
 180
 gtatcgaatg tgtgtctgtg tgtaaggaat gtgtgtgtat ggaatgtgtt tacgtgcatg
 240
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 297

<210> 782
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 782
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 1 5 10 15
 Cys Met Glu Cys Val Cys Met Xaa Ile Cys Val Cys Met Xaa Met Cys

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      20      25      30
Val Cys Val Trp Asn Val Cys Met Glu Cys Val Ser Val Tyr Gly Ile
      35      40      45
Cys Val Ser Met Xaa Met Cys Val Cys Val Trp Asn Val Ser Asn Val
      50      55      60
Cys Leu Cys Val Arg Asn Val Cys Val Trp Asn Val Phe Thr Cys Met
65      70      75      80
Cys Leu Glu Cys Val Cys Met Glu Cys Val Cys Met Cys Met Xaa Met
      85      90      95
Cys Val Cys

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<210> 783
 <211> 612
 <212> DNA
 <213> Homo sapiens

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<400> 783
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caccgggtcg agtgagctgc ccagcagcaa gccaccaca tcggtgacca gaccgatcac
120
tttgttgagc acgtcgatga cgggcaactt caaggaaatc caggtgcgga cttgcgcggt
180
ccgcacaaaa atcggtctggg tgcgatcaa ctgcggggttg ccaatcgagc aatttgcgcg
240
gttcgatgac acgtgtcttc accgtgatat tcagcagccc cagtacgtcc accggcaact
300
cgacggccac cgcgtctggt ttgttgga gctgcacaaa gccctgaatc aggttgaaca
360
gttgacaggtt gacgtccagg gcgctcttgt ccgtgccgtt ttgtatattg atcaggtcgc
420
ccaggtgcag gatctgcgtg cctggggcaa tcagcttgat tgcttcgagg ttattgatca
480
ccacctggac cgcattaccg ccagcttga gcacatcgat ggcggcctgg atcaactggc
540
cgacggctgc gtcggtcttg agcaactggt cgtagttgcc ggcgctgacg ttgaggcgga
600
tggccgacgc gt
612

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<210> 784
 <211> 190
 <212> PRT
 <213> Homo sapiens

```

<400> 784
Met Ser Ile Cys Val Pro Gly Thr Gly Ser Ser Glu Leu Pro Ser Ser
1      5      10      15
Lys Pro Thr Thr Ser Val Thr Arg Pro Ile Thr Leu Leu Ser Thr Ser
      20      25      30
Met Thr Gly Asn Phe Lys Glu Ile Gln Val Arg Thr Cys Ala Val Arg
      35      40      45
Thr Lys Ile Gly Trp Val Ser Ile Asn Cys Gly Leu Pro Ile Ala Glu

```

```

      50              55              60
Phe Ala Arg Phe Asp Asp Thr Cys Leu His Arg Asp Ile Gln Gln Pro
65              70              75              80
Gln Tyr Val His Arg Gln Leu Asp Gly His Arg Ala Gly Phe Val Gly
      85              90              95
Gln Leu His Lys Ala Leu Asn Gln Val Glu Gln Leu Gln Val Asp Val
      100              105              110
Gln Gly Ala Leu Val Arg Ala Val Leu Tyr Ile Asp Gln Val Ala Gln
      115              120              125
Val Gln Asp Leu Arg Ala Trp Gly Asn Gln Leu Asp Cys Phe Glu Val
      130              135              140
Ile Asp His His Leu Asp Arg Ile Thr Ala Gln Leu Glu His Ile Asp
145              150              155              160
Gly Gly Leu Asp Gln Leu Ala Asp Gly Arg Val Gly Leu Glu Gln Leu
      165              170              175
Val Val Val Ala Gly Ala Asp Val Glu Ala Asp Gly Arg Arg
      180              185              190

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<210> 785

<211> 408

<212> DNA

<213> Homo sapiens

<400> 785

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accttggact acttcactat cgaccctcgg ctaggcgacg acgatgactt cgatcacctg
60
cttcaggccg cccacgctcg tggctctgtca gtactgctcg acgggggtggt caaccacgtc
120
tcgcgtcgca accgcatcgt gcaggatgcg cagagtgtcg ggccagattc agacgccggc
180
cgtatgggttc gctgggtgtga ggggcgcctc gacgttttcg aggggtcatag tgacctggtc
240
gcactcaacc acgacaaccc cgcagtgcgg gaacatgtca cccggatcat gaactattgg
300
tgcggtcgcg gtgttgacgg ctggcggctg gacgccgcta ttccgtcaat cctgagttct
360
gggctgcggg gctgectcgg gtgcgagaga agcgcctga cgtgagga
408

```

<210> 786

<211> 134

<212> PRT

<213> Homo sapiens

<400> 786

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Thr Leu Asp Tyr Phe Thr Ile Asp Pro Arg Leu Gly Asp Asp Asp Asp
1      5      10      15
Phe Asp His Leu Leu Gln Ala Ala His Ala Arg Gly Leu Ser Val Leu
      20      25      30
Leu Asp Gly Val Val Asn His Val Ser Arg Arg Asn Arg Ile Val Gln
      35      40      45
Asp Ala Gln Ser Ala Gly Pro Asp Ser Asp Ala Gly Arg Met Val Arg
      50      55      60
Trp Cys Glu Gly Arg Leu Asp Val Phe Glu Gly His Ser Asp Leu Val

```

```

65              70              75              80
Ala Leu Asn His Asp Asn Pro Ala Val Arg Glu His Val Thr Arg Ile
              85              90              95
Met Asn Tyr Trp Cys Gly Arg Gly Val Asp Gly Trp Arg Leu Asp Ala
              100              105              110
Ala Ile Pro Ser Ile Leu Ser Ser Gly Leu Arg Cys Cys Leu Arg Cys
              115              120              125
Glu Arg Ser Ala Leu Thr
              130

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<210> 787
 <211> 310
 <212> DNA
 <213> Homo sapiens

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<400> 787
acgcgtgaag gggaatgaaa gggtttttcc tggatcaaaa tgatgcttgt ggcagacaca
60
gttggaacca cagacgatgc cacgcttggtg tcagcagtgc gacactggcc cacgtggcgt
120
ccttgggtctc tcttcattgc tgccgtcact gtgtgctggg catgccctgc agttacccca
180
aagctttatg tcacaacatt gaggctggcg gagaaagacc ggcccccttca cccacctta
240
gacttccttg aagggccgcc cgggtccaca acctggcccg ttaactccct gggcagctgc
300
tgggggagaa
310

```

<210> 788
 <211> 90
 <212> PRT
 <213> Homo sapiens

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<400> 788
Met Met Leu Val Ala Asp Thr Val Gly Thr Thr Asp Asp Ala Thr Leu
1      5      10      15
Val Ser Ala Val Arg His Trp Pro Thr Trp Arg Pro Trp Ser Leu Leu
20     25     30
Ile Ala Ala Val Thr Val Cys Trp Ala Cys Pro Ala Val Thr Pro Lys
35     40     45
Leu Tyr Val Thr Thr Leu Arg Leu Ala Glu Lys Asp Arg Pro Leu His
50     55     60
Pro Thr Leu Asp Phe Leu Glu Gly Pro Pro Gly Ser Thr Thr Trp Pro
65     70     75     80
Val Asn Ser Leu Gly Ser Cys Trp Gly Arg
85     90

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<210> 789
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 789

acgcgtgaag ttgcagcagc aagcaatctg cctcgcttct ggtgcccacc gaaaccaagg
 60
 tctgccagac agcagcgctg ggacctctcc cctccccagc aggatggggc ggctctggaa
 120
 gcacgaggtg ttccaaagtg caaacaagct gctgttaaata aattattccc aaacgccaaa
 180
 gcccttgctg gtttgcttgc ttgctttttt ctttttttgc ctgcacaga tatcgctagg
 240
 gcagagtatt gacatttcgt tttctttttg ttatgggtga taaagcacgg tgtttcttgt
 300
 gagtgtatgc ctgtatttcc ctgcagagct gattgccagt ccattttctt ctatcccatc
 360
 cccattttc
 369

<210> 790

<211> 114

<212> PRT

<213> Homo sapiens

<400> 790

Met	Asp	Trp	Gln	Ser	Ala	Leu	Gln	Gly	Asn	Thr	Gly	Ile	His	Ser	Gln
1			5					10					15		
Glu	Thr	Pro	Cys	Phe	Ile	Thr	His	Asn	Lys	Lys	Lys	Thr	Lys	Cys	Gln
		20						25					30		
Tyr	Ser	Ala	Leu	Ala	Ile	Ser	Val	Arg	Gly	Lys	Lys	Arg	Lys	Lys	Gln
		35					40					45			
Ala	Ser	Lys	Pro	Ala	Arg	Ala	Leu	Ala	Phe	Gly	Asn	Asn	Tyr	Leu	Thr
		50				55					60				
Ala	Ala	Cys	Leu	His	Phe	Gly	Thr	Pro	Arg	Ala	Ser	Arg	Ala	Gly	Pro
65				70					75					80	
Ser	Cys	Trp	Gly	Gly	Glu	Arg	Ser	Gln	Arg	Cys	Cys	Leu	Ala	Asp	Leu
			85					90						95	
Gly	Phe	Gly	Gly	His	Gln	Lys	Arg	Gly	Arg	Leu	Leu	Ala	Ala	Ala	Thr
		100						105					110		

Ser Arg

<210> 791

<211> 420

<212> DNA

<213> Homo sapiens

<400> 791

nctctgacca aaaggaaggt atatgaaaac acaacactag gcttcattgt tgaagttgaa
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 ggtcttccag ttcttggtgt gaaatggtat cgaaataaat ctttactaga gccagatgaa
 120
 agaatcaaaa tggaaagagt gggtaatgtg tgttcactgg aaatttctaa cattcaaaaa
 180
 ggagaagggg gagagtacat gtgtcatgct gtaaacaatca taggggaagc aaagagcttt
 240
 gcaaagttag acataatgcc ccaggaagaa agagtgggtg cactaccacc tccagtaaca
 300

catcagcatg tcatggagtt tgatttggaa cacaccacat catcaagaac accttctcct
 360
 caagaaattg tcctggaagt tgaattaagt gaaaaagacg ttaaagaatt tgagaagcag
 420

<210> 792
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 792
 Thr Lys Arg Lys Val Tyr Glu Asn Thr Thr Leu Gly Phe Ile Val Glu
 1 5 10 15
 Val Glu Gly Leu Pro Val Pro Gly Val Lys Trp Tyr Arg Asn Lys Ser
 20 25 30
 Leu Leu Glu Pro Asp Glu Arg Ile Lys Met Glu Arg Val Gly Asn Val
 35 40 45
 Cys Ser Leu Glu Ile Ser Asn Ile Gln Lys Gly Glu Gly Gly Glu Tyr
 50 55 60
 Met Cys His Ala Val Asn Ile Ile Gly Glu Ala Lys Ser Phe Ala Asn
 65 70 75 80
 Val Asp Ile Met Pro Gln Glu Glu Arg Val Val Ala Leu Pro Pro Pro
 85 90 95
 Val Thr His Gln His Val Met Glu Phe Asp Leu Glu His Thr Thr Ser
 100 105 110
 Ser Arg Thr Pro Ser Pro Gln Glu Ile Val Leu Glu Val Glu Leu Ser
 115 120 125
 Glu Lys Asp Val Lys Glu Phe Glu Lys Gln
 130 135

<210> 793
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 793
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 60
 ccgcgaacag tactgcggga acccaaacga tcatttttaa cccagacgt ccctgaacca
 120
 aagccaaagt ctacaggtca ctggggcaga ggccgcccga aaccagcttc ccctcccgcc
 180
 ctaggcgcgc caggtccccg ccagccggg gcgacccctt ggtcggacag tgaggttggg
 240
 agcccaccgc acccaagtcc gccgcatcca cccggcgag gcgacccccg acgggcagcc
 300
 gctcaccttc tcctggcccc ggcttcagga aaactgcctg gaggtggccg gggttcccta
 360
 gcggaggctg ggcgccgggc ttccgcctg cctcagtctc cccatccgtg gcccggggga
 420
 tggagcccg tgccgcgaga ggctgcggca ggtcccagcc aggtgccctg gaacgtgga
 479

<210> 794

<211> 159
 <212> PRT
 <213> Homo sapiens

<400> 794
 Xaa Ala Cys Arg Phe Ser Glu Ile His Tyr Gly Asn Val Arg Val Val
 1 5 10 15
 Glu Met Leu Arg Pro Arg Thr Val Leu Arg Glu Pro Lys Arg Ser Phe
 20 25 30
 Leu Thr Pro Asp Val Pro Glu Pro Lys Pro Lys Ser Thr Gly His Trp
 35 40 45
 Gly Arg Gly Arg Pro Lys Pro Ala Ser Pro Pro Gly Leu Gly Ala Pro
 50 55 60
 Gly Pro Arg Pro Ala Gly Ala Ile Leu Trp Ser Asp Ser Glu Val Gly
 65 70 75 80
 Ser Pro Pro His Pro Ser Pro Pro His Pro Pro Gly Ala Gly Asp Pro
 85 90 95
 Arg Arg Ala Ala His Leu Leu Leu Ala Pro Ala Ser Gly Lys Leu
 100 105 110
 Pro Gly Gly Gly Arg Gly Ser Leu Ala Glu Ala Gly Arg Arg Ala Ser
 115 120 125
 Arg Leu Pro Gln Ser Pro His Pro Trp Pro Gly Gly Trp Ser Pro Leu
 130 135 140
 Arg Ala Glu Ala Ala Ala Gly Pro Ser Gln Val Pro Trp Asn Val
 145 150 155

<210> 795
 <211> 1418
 <212> DNA
 <213> Homo sapiens

<400> 795
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 ccggactacg aggcgctgcc ggctggagcc actgtcacca cgcacatggt ggcaggcgcc
 120
 gtggcaggga tcttgagca ctgcgtgatg taccctcatcg actgcgtcaa gaccgggatg
 180
 cagagtctac agcctgaccc agctgcccgc tctcgcaatg tgttgagggc cctctggagg
 240
 attataagaa cggagggcct atggaggccc atgagggggc tgaacgtcac agcaacaggc
 300
 gcagggcctg cccacgcctt ttattttgcc tgctacgaaa agttaaaaaa gacattgagt
 360
 gatgtaatcc accctggggg caatagccat attgccaatg gtgcggccgg gtgtgtggca
 420
 acattacttc atgatgcagc catgaaccct gcggaaggct gatctgctga cttggggctc
 480
 tgaatctgga tactctccat caccgggttg ctgctgtcac catttccttc ctggttgatg
 540
 gcactactag tggtaagca gaggatgcag atgtacaact caccatacca ccgggtgaca
 600
 gactgtgtac gggcagtgtg gcaaaatgaa ggggccgggg ccttttaccg cagctacacc
 660

acccagctga ccatgaacgt tcctttccaa gccattcact tcatgaccta tgaattcctg
 720
 caggagcact ttaaccccca gagacggtac aacccaagct cccacgtcct ctctggagct
 780
 tgcgcaggag ctgtagctgc cgcagccaca accccactgg acgtttgcaa aacactgctc
 840
 aacacccagg agtccttggc tttgaactca cacattacag gacatatcac aggcatggct
 900
 agtgccttca ggacggtata tcaagtaggt ggggtgaccg cctatttcctg aggggtgcag
 960
 gccagagtaa tttaccagat cccctccaca gccatgcat ggtctgtgta tgagttcttc
 1020
 aaatacctaa tcactaaaag gcaagaagag tggagggctg gcaagtgaag tagcactgaa
 1080
 cgaagccagg gggtcagatg aactgctgc atcctgggtca cattctctgt ctctggaat
 1140
 gctccacact caagtggagt tagaaggaag gtagaggggc tctccccag gattttgggtg
 1200
 ttttgactaa caccagttcc tgccaacctc tgttgccacc acctttcctt ccaggcccta
 1260
 agcacgtgca gcaaagcaca ccacagcacc tttgataacc tctctccatc ctgggcctga
 1320
 tgacctgctc tagactgtta tagagggata agcagctcat tcccctgggt cctaataaaa
 1380
 agcctttaaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaaa
 1418

<210> 796

<211> 176

<212> PRT

<213> Homo sapiens

<400> 796

Met	Ala	Leu	Leu	Val	Val	Lys	Gln	Arg	Met	Gln	Met	Tyr	Asn	Ser	Pro
1				5					10					15	
Tyr	His	Arg	Val	Thr	Asp	Cys	Val	Arg	Ala	Val	Trp	Gln	Asn	Glu	Gly
			20					25					30		
Ala	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Val
			35				40					45			
Pro	Phe	Gln	Ala	Ile	His	Phe	Met	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	His
			50				55				60				
Phe	Asn	Pro	Gln	Arg	Arg	Tyr	Asn	Pro	Ser	Ser	His	Val	Leu	Ser	Gly
65					70				75					80	
Ala	Cys	Ala	Gly	Ala	Val	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val
			85					90						95	
Cys	Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Ser	Leu	Ala	Leu	Asn	Ser	His
			100				105					110			
Ile	Thr	Gly	His	Ile	Thr	Gly	Met	Ala	Ser	Ala	Phe	Arg	Thr	Val	Tyr
		115				120					125				
Gln	Val	Gly	Gly	Val	Thr	Ala	Tyr	Phe	Arg	Gly	Val	Gln	Ala	Arg	Val
		130				135					140				
Ile	Tyr	Gln	Ile	Pro	Ser	Thr	Ala	Ile	Ala	Trp	Ser	Val	Tyr	Glu	Phe
145				150					155					160	
Phe	Lys	Tyr	Leu	Ile	Thr	Lys	Arg	Gln	Glu	Glu	Trp	Arg	Ala	Gly	Lys

165

170

175

<210> 797

<211> 585

<212> DNA

<213> Homo sapiens

<400> 797

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aaatttaccg gcggaacaaac ccacgtcacc gactacacca acgctctcgcg caccatgctc
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ttcaacatcc acacgctgga gtgggatgcg aagatgctgg agattctcga cgtgccgcgc
120
gagatgctgc cggaagttaa gtcgtcttca gaaatctacg gccgcaccaa aagcgggtatc
180
gctatcggcg gcatcgcggg cgaccaacag gctgctctgt tcggccagat gtgcgtggaa
240
gccgggcagg ccaagaacac ttatggcacc ggctgcttcc tgctgatgaa caccggcgac
300
aaagccgtca aatccaaaca cggcattgctc accaccatcg cctgcgggtcc acgcggcgaa
360
gtggcttatg cgctggaagg cgcggtgttc aacggtgggt ccccgctgca gtggctgcgt
420
gatgagctga agatcatcgc ggacgccacc gacaccgaat acttcgccgg caaggtcaag
480
gacagcaacg gcgtctacct ggtgccggcc ttaccggcc tgggcgctcc gtactgggac
540
ccgtatgccg gtggcgcttt gtttggcctg actcgtggcg tacgc
585

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<210> 798

<211> 195

<212> PRT

<213> Homo sapiens

<400> 798

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Lys Phe Thr Gly Gly Lys Thr His Val Thr Asp Tyr Thr Asn Ala Ser
  1             5             10             15
Arg Thr Met Leu Phe Asn Ile His Thr Leu Glu Trp Asp Ala Lys Met
      20             25             30
Leu Glu Ile Leu Asp Val Pro Arg Glu Met Leu Pro Glu Val Lys Ser
      35             40             45
Ser Ser Glu Ile Tyr Gly Arg Thr Lys Ser Gly Ile Ala Ile Gly Gly
      50             55             60
Ile Ala Gly Asp Gln Gln Ala Ala Leu Phe Gly Gln Met Cys Val Glu
      65             70             75             80
Ala Gly Gln Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Leu Leu Met
      85             90             95
Asn Thr Gly Asp Lys Ala Val Lys Ser Lys His Gly Met Leu Thr Thr
      100            105            110
Ile Ala Cys Gly Pro Arg Gly Glu Val Ala Tyr Ala Leu Glu Gly Ala
      115            120            125
Val Phe Asn Gly Gly Ser Pro Val Gln Trp Leu Arg Asp Glu Leu Lys
      130            135            140
Ile Ile Ala Asp Ala Thr Asp Thr Glu Tyr Phe Ala Gly Lys Val Lys

```

145		150		155		160									
Asp	Ser	Asn	Gly	Val	Tyr	Leu	Val	Pro	Ala	Phe	Thr	Gly	Leu	Gly	Ala
			165						170					175	
Pro	Tyr	Trp	Asp	Pro	Tyr	Ala	Arg	Gly	Ala	Leu	Phe	Gly	Leu	Thr	Arg
			180						185					190	
Gly	Val	Arg													
		195													

<210> 799

<211> 2152

<212> DNA

<213> Homo sapiens

<400> 799

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nntttttttt tttttttgat ggtgcatgta gttttattta tgtgttttca tctggaaaac
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caagtgtccc agcagcatga ctgaacatca ctcacttccc ctacttgatc tacaaggcca
120
acgccgagag cccagaccag gattccaaac aactgcacg agaatattgt ggatccgctg
180
tcaggtaagt gtccgtcact gacccagacg ctgttacgtg gcacatgact gtacagtgcc
240
acgtaacagc actgtacttt tctcccataa acagttacct gccatgtatc tacatgattc
300
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360
ctttgatgtt gtaacgacaa catagcatca ctttacgaca gaatcatctg gaaaaacaga
420
acaacgaata catacatctt aaaaaatgct ggggtgggcc aggcacagct cagcctgta
480
atcccagcac tttgggaggc tgaggcgggt ggatcacgta atcccagcac tttgaggggc
540
agaggtggac agatcatgag gtcaagagat caagaccatc ctgggtcaaaa tggtgaaacc
600
ccgtctctac taaaaataca aaaattagct gagcttagtg gcacacacct gtagtcccag
660
ctacttggga ggctgaggca ggagaatcgc ttgaaccag gagacacagg ctgcagtgc
720
tcgagatcac gccactgcac tccagcctgg cgacagagcg agactccatc tcaaaaaaaa
780
aaaccaacaa aaaaactggg gtgaaaatct aacggataat tcagcattgc cgcatagaaa
840
ctccgcgaaa accggccaaa caaacgcgga caggcggccc tggcgtcagc gcacgacagt
900
cacgtgggga ggggcagtgg ccaggtcggc cttggacggg tacaccacct tcaggctccc
960
ttccagatcc accaccgga cctgctccac caccagaagg gagggcccgt cctttccagc
1020
actgggatcc gttgtgggat ctggaagttg tccagagact gcacggcctt cagtatctga
1080
gagtgatcct tctcttttat tttctaaagt gtactttttc atttctgcca ttttcagaat
1140
gagggcatcc atgacatcct tgcaaatctg cagactgggtg gcacttggtta cttccaaaaa
1200

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caaatcagaa gtcgttttct taacctttgt cttctcactg ttggttattg gtgggaagga
 1260
 aatcacatca ccgtctgcat ccacaagaca cgggtaattt tcatttccat ccagcaagtg
 1320
 aaggatatctg tgcaggcccc acacactctg ccgcttcttc tgcttctct gctcctcggc
 1380
 ctccagctgc agctgccgca ccagctcctt ggccttggct tctttccgcc ccaaggggac
 1440
 aatcttgagg tctgtgggg gccgggcgca gtacagcagg ggccctttga cggcacggag
 1500
 ctcggtgggtg gcaaggggtg cagccgtcct cttctcacag agatcttcgt ggagcttggg
 1560
 ctgcgaggtg aggaagcgct tgagtgcatt ccctggctgc aggtccatgc ctgcaccac
 1620
 ggccccaca atgtagggcc gcacatcccg gacctcgagg ctcaactctga ctgtcagagg
 1680
 tacggggttt tcagagacgt gcaggacct gagcagcagc cggccggcat ctcccacgtc
 1740
 ctgctcctcc ccatcaccac cttcccgct ctgcttcttc tccctctct tctccggct
 1800
 ctcttcttc tccgagcct cggcacggcc cttgcccttc ccgccaccac ggctccgac
 1860
 gcgcaggtac tccaggatgg atctggtctg gcagccgctg accatcttct ccaggcgctt
 1920
 gtccctcagc ttgttccac ggaaattgat ctccttgagc ttggggcagt ccgcaagctc
 1980
 tgcagggatc tcgctcagct ggttgttcga gaggtccaac gtcttgagcg aggccagggtg
 2040
 ggcatgtcg gggctgagtt ctcggaggca gttgtcagca gccgccagtt cactgagcag
 2100
 gggcagcgcg ccggggcgaa agagctcggc gggaaaggag tctaggcaat tg
 2152

<210> 800

<211> 95

<212> PRT

<213> Homo sapiens

<400> 800

Cys	Cys	Asn	Asp	Asn	Ile	Ala	Ser	Leu	Tyr	Asp	Arg	Ile	Ile	Trp	Lys
1				5					10					15	
Asn	Arg	Thr	Thr	Asn	Thr	Tyr	Ile	Leu	Lys	Asn	Ala	Gly	Val	Gly	Gln
		20						25					30		
Ala	Gln	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly
		35					40					45			
Gly	Ser	Arg	Asn	Pro	Ser	Thr	Leu	Arg	Gly	Arg	Gly	Gly	Gln	Ile	Met
	50					55				60					
Arg	Ser	Arg	Asp	Gln	Asp	His	Pro	Gly	Gln	Asn	Gly	Glu	Thr	Pro	Ser
65				70					75					80	
Leu	Leu	Lys	Ile	Gln	Lys	Leu	Ala	Glu	Leu	Ser	Gly	Thr	His	Leu	
				85				90						95	

<210> 801

<211> 424

<212> DNA

<213> Homo sapiens

<400> 801

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nntcatgaat cggtataaac acaatgggta gtgtatatca tatctatagg agatactatg
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tatcaaatta atcagctgtc tttttcttat gaaacaaaag aagtgttaaa gaatatttct
120
gtaacatttc ctaccaataa aataacagcc ataattggac cgaatggatg tggtaagtct
180
accctactta gccatctata tcgacttcat tcaacaaaaa acaaaatcac attaaacgga
240
aaaccttttag agtcttataa aggtcgcgaa tttgctcaat tggtagcagt cttaacacaa
300
tctagagacg ctatgattga tgattttctc gtaaaagata tcgttctcat gggacgggat
360
ccgtacaaac aacactttgg cacctatagt tctgaagatg ttaaaattgc agagcattat
420
atgn
424

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<210> 802

<211> 122

<212> PRT

<213> Homo sapiens

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1345	1350	1355
Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val Cys His Leu Phe Ala		1360
1365	1370	1375
Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile Val Thr Phe Ile Thr		
1380	1385	1390
Lys Val Leu Leu Gly Gln Arg Lys		
1395	1400	

<210> 805

<211> 550

<212> DNA

<213> Homo sapiens

<400> 805

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120
agtcattcat ttacttatca agctgttact gtgtgtgcaa gaagcgccag agagatgata
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tcaaggagct cttaccatgg ctggcataga gcggctgatg agtaagttcc gtctgcacaa
240
agagtcctta agcattcatt cttggetgac attcttggtc caggggggtc ccatggcett
300
gttccccctc tcgggtcacc agttcaggtc gagggggcct atgcttgga gggccacacc
360
aatggacctt gccaggacac tcagtcacag gtttcacacc caaagagaag acagcccaac
420
ccagaccctc aaaagagagc acctggggga agggagcgtg gaaaccagga ctcagaaaga
480

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cacaagagaa aaagaagctg tacactgggg aggcttccgg ggtacctgtg cctgccatgt
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 ctctgaaggc
 550

<210> 806
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 806
 Met Ala Gly Ile Glu Arg Leu Met Ser Lys Phe Arg Leu His Lys Glu
 1 5 10 15
 Ser Leu Ser Ile His Ser Trp Leu Thr Phe Leu Ala Gln Gly Val Ser
 20 25 30
 Met Ala Leu Phe Pro Ser Ser Gly His Gln Phe Arg Ser Arg Gly Pro
 35 40 45
 Met Leu Gly Arg Ala Thr Pro Met Asp Leu Ala Arg Thr Leu Ser His
 50 55 60
 Arg Phe His Thr Gln Arg Glu Asp Ser Pro Thr Gln Thr Leu Lys Arg
 65 70 75 80
 Glu His Leu Gly Glu Gly Ser Val Glu Thr Arg Thr Gln Lys Asp Thr
 85 90 95
 Arg Glu Lys Glu Ala Val His Trp Gly Gly Phe Arg Gly Thr Cys Ala
 100 105 110
 Cys His Val Ser Glu Gly
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<210> 807
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 807
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 120
 ccgagtgggt cgaagctcag accgggacag gccgctatac cagcgcgagc gattatatct
 180
 gcgccttgat tcgccaggac caggagcgaa gcgacggcct caggcagctt caaacgttga
 240
 tcaccgaggg gttegcacgc ggcacacgcg cctcgtcgct tgatgac
 287

<210> 808
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 808
 Met Ala Val Ala Leu Pro His Trp Gln Asp Ala Lys Phe Leu Ala Met
 1 5 10 15
 Ile Ser Arg Gly Gly Arg Ala Arg Gly Met Ala Thr Val Asn Val Ser

```

                20                25                30
Leu Ser Asp Ala Met Thr Glu Trp Val Glu Ala Gln Thr Gly Thr Gly
      35                40                45
Arg Tyr Thr Ser Ala Ser Asp Tyr Ile Cys Ala Leu Ile Arg Gln Asp
      50                55                60
Gln Glu Arg Ser Asp Gly Leu Arg Gln Leu Gln Thr Leu Ile Thr Glu
      65                70                75                80
Gly Phe Asp Ser Gly Ile Ser Ala Ser Ser Leu Asp Asp
                85                90

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<210> 809

<211> 405

<212> DNA

<213> Homo sapiens

<400> 809

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120
gacgcgtggt cgcgtaaat ggagagacga tgggtgccgc ccttgcccca cgatcctgat
180
ggccccgaga ttcttgacga tgtcaccacc ctgcccac aggtaatggg tctgccacgt
240
cacctgggta tccactcagc tggaatgggt ctgacgcgag aaccagtagg acgcatctgc
300
cccattgagc cggctcgaat gtttggtcgc acggggctgc agtgggacaa anaaaactgt
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gcctggatgg gggtggggaa gtttgatctg cttgggttgg ggatg
405

```

<210> 810

<211> 135

<212> PRT

<213> Homo sapiens

<400> 810

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Xaa Gly Gly Gly Gly Gly Gly Val Phe Phe Pro Pro Lys Lys Lys Lys
  1                5                10                15
Gly Gly Gly Gly Gly Pro Pro Pro Pro Pro Pro Leu Phe Phe Pro Arg
      20                25                30
Gly Val Tyr Ser Gln Gly Gln Gln Asp Ala Trp Ser Arg Gln Met Glu
      35                40                45
Arg Arg Ser Val Pro Pro Leu Pro His Asp Pro Asp Gly Pro Glu Ile
      50                55                60
Pro Asp Asp Val Thr Thr Leu Ala Gln Gln Val Met Gly Leu Pro Arg
      65                70                75                80
His Leu Gly Ile His Ser Ala Gly Met Val Leu Thr Arg Glu Pro Val
      85                90                95
Gly Arg Ile Cys Pro Ile Glu Pro Ala Arg Met Phe Gly Arg Thr Gly
      100                105                110
Leu Gln Trp Asp Lys Xaa Asn Cys Ala Trp Met Gly Leu Gly Lys Phe
      115                120                125
Asp Leu Leu Gly Leu Gly Met

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130

135

<210> 811
 <211> 642
 <212> DNA
 <213> Homo sapiens

<400> 811
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 120
 tgggtgacaca ttaacaacac ccgggaagca gtactgccaa cacctagata tgagaaaaag
 180
 aaaacaggca cttaaagcga ggctaaccga ctttcaggaa tgataaaggg cagaggaccc
 240
 tgtcacctct acccctgcta ctaaaggcgt ggcccacaga gcagcagcac cagcagcaca
 300
 taaaatgggg ttaaataatga caggaaaaac aagggtgacag ggaaatgggg tgaagatcaa
 360
 gttcgtggta ngtctttctt tcttagagggc tttgggcctg agctcttgga gaaagctctc
 420
 caacacctca ggggtgtgct gttccctgc cctgtgggga tgctctttgt acgggtggct
 480
 gactggctcc cactttctc cgtattgttg tcttgctct tccctcaca ccatcaaggc
 540
 tctttccctt aattctataa gacagtacct ctggcttaga aattatatgc cctcctttaa
 600
 aaaaacgaaa tgctagagga catagaactt gaggaaaaat tt
 642

<210> 812
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 812
 Met Val Val Arg Glu Thr Arg Gln Gln Tyr Gly Gly Lys Trp Glu
 1 5 10 15
 Pro Val Ser His Pro Tyr Lys Glu His Pro His Arg Ala Gly Glu Gln
 20 25 30
 Ala His Pro Glu Val Leu Glu Ser Phe Leu Gln Glu Leu Arg Pro Lys
 35 40 45
 Ala Ser Arg Lys Glu Arg Xaa Thr Thr Asn Leu Ile Phe Thr Pro Phe
 50 55 60
 Pro Cys His Leu Val Phe Pro Val Ile Phe Asn Pro Ile Leu Cys Ala
 65 70 75 80
 Ala Gly Ala Ala Ala Leu Trp Ala Thr Pro Leu Val Ala Gly Val Glu
 85 90 95
 Val Thr Gly Ser Ser Ala Leu Tyr His Ser
 100 105

<210> 813
 <211> 558

<212> DNA

<213> Homo sapiens

<400> 813

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ccccggcgat agtcgcgtgg ggtcatggcg gatgaggggt taagagcgcg ttactgcgg
60
cgcccgactc cgatcagccg ttcggaaagg cgacgccgaa gatcatgaca ttctcggccg
120
gttcgctgac cagcaccggg cggcccggct gggccgggaa accgtggaac aagggaagcg
180
ggggcggcgc gcggggtgac gccttcggcc cctcgcctt cggtcagcgt gcggcgcaat
240
tcggggtcga ggatgatccg cggcccttcg atcttgacca cgatctccag ttgcccgcc
300
ttgtcttcgc cgccgacatc cagcgtgccg ccgcgcacca gcgcctcgtt ggcgatcagg
360
gcgaggttca gcatcacctt cagcgcggac ttgggcagcg tctccgtttc caccaccag
420
ttgaattgcy tgcgcttatt gtcggcaacc agccctcgtt tcgcggtttt cgcttcgcgc
480
gcgtcgacct gttcgccgaa cccgccggcg gcgcagaagg cgaggcggaa gaatttgagc
540
ttgttggcgg atacgcgt
558

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<210> 814

<211> 151

<212> PRT

<213> Homo sapiens

<400> 814

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Met Thr Phe Ser Ala Gly Ser Leu Thr Ser Thr Gly Pro Pro Gly Trp
  1             5             10             15
Ala Gly Lys Pro Trp Asn Lys Gly Ser Gly Gly Gly Ala Arg Gly Asp
      20             25             30
Ala Phe Gly Pro Leu Ala Phe Gly Gln Arg Ala Ala Gln Phe Gly Val
      35             40             45
Glu Asp Asp Pro Arg Pro Phe Asp Leu Asp His Asp Leu Gln Leu Pro
      50             55             60
Ala Ile Val Phe Ala Ala Asp Ile Gln Arg Ala Ala Ala His Gln Arg
      65             70             75             80
Leu Ala Gly Asp Gln Gly Glu Val Gln His His Leu Gln Arg Gly Leu
      85             90             95
Gly Gln Arg Leu Arg Phe His Pro Pro Val Glu Leu Arg Ala Leu Ile
      100            105            110
Val Gly Asn Gln Pro Leu Val Arg Gly Phe Arg Phe Ala Arg Val Asp
      115            120            125
Leu Phe Ala Glu Pro Ala Gly Gly Ala Glu Gly Glu Ala Glu Glu Phe
      130            135            140
Glu Leu Val Gly Gly Tyr Ala
145            150

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<210> 815

<211> 315

<212> DNA

<213> Homo sapiens

<400> 815

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120
agctagcgca ggagaaagcc gagacctcac gtccgaagcg gattcagcaa gtgcacaacc
180
ttctaccac gctgaggttt ccagtgaagt tactgctacg tccagtatag atgagcaggt
240
agacctcatt gctgcaccgt taagcgaaga gtccaatgtc agcaagctcg ggccgtcccc
300
tgaggccgat acatc
315
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<210> 816

<211> 90

<212> PRT

<213> Homo sapiens

<400> 816

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Met Pro Ser Asp Leu Pro Lys Val Asp Asp Glu Lys Ala His Asp Ala
1      5      10      15
Pro His Thr Asp Gly Ser Glu Pro Gly Gln Ala Ser Ala Gly Glu Ser
20     25     30
Arg Asp Leu Thr Ser Glu Ala Asp Ser Ala Ser Ala Gln Pro Ser Thr
35     40     45
His Ala Glu Val Ser Ser Glu Val Thr Ala Thr Ser Ser Ile Asp Glu
50     55     60
Gln Val Asp Leu Ile Ala Ala Pro Leu Ser Glu Glu Ser Asn Val Ser
65     70     75     80
Lys Leu Gly Pro Ser Pro Glu Ala Asp Thr
85     90
```

<210> 817

<211> 321

<212> DNA

<213> Homo sapiens

<400> 817

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gaattcaaag agaaatatct gcctagacct tatgtgatta atctaattga cgaactgacc
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ctgaaaggaa tcacacaata ttatgctttt gttgaagagg ggcagaaggt tcattgacct
120
aatacacttt tctcaaagct tcaaattaat caatccatta tattctgcaa ctctgttaat
180
agtgttgagc tgctggctaa aaaaataact gaactcgggt attcatgctt ctacattcat
240
gctaagatgt tgcaagacca cagaaatcga gtattccatg attgtcgtaa tgggtgcttg
300
agaaaccttg tgtgcacaga t
321
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<210> 818
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 818
 Glu Phe Lys Glu Lys Tyr Leu Pro Arg Pro Tyr Val Ile Asn Leu Met
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 Asp Glu Leu Thr Leu Lys Gly Ile Thr Gln Tyr Tyr Ala Phe Val Glu
 20 25 30
 Glu Gly Gln Lys Val His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln
 35 40 45
 Ile Asn Gln Ser Ile Ile Phe Cys Asn Ser Val Asn Ser Val Glu Leu
 50 55 60
 Leu Ala Lys Lys Ile Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ile His
 65 70 75 80
 Ala Lys Met Leu Gln Asp His Arg Asn Arg Val Phe His Asp Cys Arg
 85 90 95
 Asn Gly Ala Cys Arg Asn Leu Val Cys Thr Asp
 100 105

<210> 819
 <211> 3422
 <212> DNA
 <213> Homo sapiens

<400> 819
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 120
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 360
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 420
 tgtaaggggc gtgccaagcg acgacgacag cagcaggtgc tgcccctgga tcccgagag
 480
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 540
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960
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1080
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1980
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 2580
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 2700
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 3422

<210> 820

<211> 494

<212> PRT

<213> Homo sapiens

<400> 820

Met	Asn	Ser	Lys	Lys	Leu	Ser	Ser	Thr	Asp	Cys	Phe	Lys	Thr	Glu	Ala
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Phe	Thr	Ser	Pro	Glu	Ala	Leu	Gln	Pro	Gly	Gly	Thr	Ala	Leu	Ala	Pro
			20					25					30		
Lys	Lys	Arg	Ser	Arg	Lys	Gly	Arg	Ala	Gly	Ala	His	Gly	Leu	Ser	Lys
		35				40						45			
Gly	Pro	Leu	Glu	Lys	Arg	Pro	Tyr	Leu	Gly	Pro	Ala	Leu	Pro	Leu	Thr
	50				55						60				
Pro	Arg	Asp	Arg	Ala	Ser	Gly	Thr	Gln	Gly	Ala	Ser	Glu	Asp	Asn	Ser
65				70					75					80	
Gly	Gly	Gly	Gly	Lys	Lys	Pro	Lys	Met	Glu	Glu	Leu	Gly	Leu	Ala	Ser

<210> 821
<211> 420

<212> DNA

<213> Homo sapiens

<400> 821

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120
cgtttgccgc aaaatgtggt gctaggttcg gaaacgacct cgacggtgag cagccgtggt
180
gtctacaagt ttctgttgt gctgaagtc gatgccatct atcccgacca tcagtcgtca
240
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420

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<210> 822

<211> 133

<212> PRT

<213> Homo sapiens

<400> 822

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Met Asp Gln Val Ser Cys Val Leu Asp Asn Gly Phe Ala Ala Ile Met
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Asp Val Pro Gly Phe Asn Tyr Arg Ala His Arg Tyr Thr Glu Ala Tyr
      20           25           30
Arg Arg Leu Pro Gln Asn Val Val Leu Gly Ser Glu Thr Thr Ser Thr
      35           40           45
Val Ser Ser Arg Gly Val Tyr Lys Phe Pro Val Val Leu Lys Ser Asp
      50           55           60
Ala Ile Tyr Pro Asp His Gln Ser Ser Gly Tyr Asp Thr Glu Tyr Cys
      65           70           75           80
Ser Trp Ser Asn Thr Pro Asp Val Asp Phe Ala Leu Ala Glu Asp Tyr
      85           90           95
Pro Trp Thr Met Gly Gln Phe Val Trp Thr Gly Phe Asp Tyr Leu Gly
      100          105          110
Glu Pro Ser Pro Tyr Asp Thr Asp Ala Trp Pro Ser His Ala Ser Leu
      115          120          125
Phe Gly Ile Val Asp
      130

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<210> 823

<211> 550

<212> DNA

<213> Homo sapiens

<400> 823

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tctagattct tgggcagccg agcccctctt gaattcctca gcctaccatc atgatcaaca
60
cctcccatgt tccgtccatg aatgaccgca ctgacagcac tggagagatt taatgggtca
120

```

ccaattgagg cagtgaaggc actcatggca ctcagagctg gaatggggct gatctgagtt
 180
 gtactgttga ctgcagtggg gatgacaacc tgcattcctt tgetggctgc atcgacaact
 240
 gctttgtaaa tggcatctac ggaagcatca cctggggccac ccacaacgag gccatccttc
 300
 acctgttgac caagagatgg gtcaatcctc ggttgcaact cacaaggtgt atcttgaaaa
 360
 ggtggaagtg tagtgtttgg attctcagga agtgctgtga gcccaggctg agtgcttatt
 420
 cttttgttta ggagagctgc atcttcctgc attctcacct gaaagttctg aaacagacaa
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 550

<210> 824
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 824
 Met Ala Cys Leu Phe Gln Asn Phe Gln Val Arg Met Gln Glu Asp Ala
 1 5 10 15
 Ala Leu Leu Asn Lys Arg Ile Ser Thr Gln Pro Gly Leu Thr Ala Leu
 20 25 30
 Pro Glu Asn Pro Asn Thr Thr Leu Pro Pro Phe Gln Asp Thr Pro Cys
 35 40 45
 Glu Leu Gln Pro Arg Ile Asp Pro Ser Leu Gly Gln Gln Val Lys Asp
 50 55 60
 Gly Leu Val Val Gly Gly Pro Gly Asp Ala Ser Val Asp Ala Ile Tyr
 65 70 75 80
 Lys Ala Val Val Asp Ala Ala Ser Lys Gly Met Gln Val Val Ile Thr
 85 90 95
 Thr Ala Val Asn Ser Thr Thr Gln Ile Ser Pro Ile Pro Ala Leu Ser
 100 105 110
 Ala Met Ser Ala Phe Thr Ala Ser Ile Gly Asp Pro Leu Asn Leu Ser
 115 120 125
 Ser Ala Val Ser Ala Val Ile His Gly Arg Asn Met Gly Gly Val Asp
 130 135 140
 His Asp Gly Arg Leu Arg Asn Ser Arg Gly Ala Arg Leu Pro Lys Asn
 145 150 155 160
 Leu

<210> 825
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 825
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 60

cagttgctgg atgagcgcga gatgcgcggc gtgctcggcc acgagctgat gcacgtgtac
 120
 aaccgcgata tcctcacctc ttcggtggcg gcgggtatcg cctccatcat cggtacgatt
 180
 gcgcagattc tttcgtttgg cgcgatgttc ggtggatcca accgcgatgg tgaacgttcc
 240
 aacccccctcg ccatgttcgt ggttgctatg ctggctccca ttgctactca ggcatccag
 300
 atggctatta gccgcacccg tgaattc
 327

<210> 826
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 826
 Ala Phe Ala Thr Gly Arg Asn Pro Gln Asn Ala Ala Val Cys Cys Thr
 1 5 10 15
 Glu Gly Ile Leu Gln Leu Leu Asp Glu Arg Glu Met Arg Gly Val Leu
 20 25 30
 Gly His Glu Leu Met His Val Tyr Asn Arg Asp Ile Leu Thr Ser Ser
 35 40 45
 Val Ala Ala Gly Ile Ala Ser Ile Ile Gly Thr Ile Ala Gln Ile Leu
 50 55 60
 Ser Phe Gly Ala Met Phe Gly Gly Ser Asn Arg Asp Gly Glu Arg Ser
 65 70 75 80
 Asn Pro Leu Ala Met Phe Val Val Ala Met Leu Ala Pro Ile Ala Thr
 85 90 95
 Gln Val Ile Gln Met Ala Ile Ser Arg Thr Arg Glu Phe
 100 105

<210> 827
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 827
 nacgcgtacg tcaatatgca tcgtccagtc gttatcgcaa cgccgaaatc gatgctgcgc
 60
 aacaagatgg cgacctcgga tcccgaagag ttcaccaaccg gtaggtggcg tcctgttcta
 120
 cccgacccat cgatcaccca cccgacggcc gttacgagga ttatcttgtg ctctggcaag
 180
 gcgcggtggg agctgggtcaa gcaacgtaag gccgccagtc ttgacggaca gctcgccatc
 240
 atcccgatgg agcgtctcta cccgctacca gtcgacgagt tggctgaggt ttttgcgcct
 300
 tacaccaacg tcacggatgt ccgctgggtc caagaagagc cagagaacca gggcgccctgg
 360
 tactacatgc tgaccacact gcccaggcc atgtcggaga agctgccagg attctttgat
 420
 gggttagtcg gcatcacccg cccaccgtcc tcagctccgt cggtgggaca gcacagcgtc
 480

cacatccgtg aagagcagga gttactcgag aaggctatag cctgagcgac ctga
534

<210> 828

<211> 174

<212> PRT

<213> Homo sapiens

<400> 828

Xaa	Ala	Tyr	Val	Asn	Met	His	Arg	Pro	Val	Val	Ile	Ala	Thr	Pro	Lys
1				5					10					15	
Ser	Met	Leu	Arg	Asn	Lys	Met	Ala	Thr	Ser	Asp	Pro	Glu	Glu	Phe	Thr
			20					25					30		
Thr	Gly	Arg	Trp	Arg	Pro	Val	Leu	Pro	Asp	Pro	Ser	Ile	Thr	Asp	Pro
		35				40						45			
Thr	Ala	Val	Thr	Arg	Ile	Ile	Leu	Cys	Ser	Gly	Lys	Ala	Arg	Trp	Glu
	50				55					60					
Leu	Val	Lys	Gln	Arg	Lys	Ala	Ala	Ser	Leu	Asp	Gly	Gln	Leu	Ala	Ile
65				70					75					80	
Ile	Pro	Met	Glu	Arg	Leu	Tyr	Pro	Leu	Pro	Val	Asp	Glu	Leu	Ala	Glu
			85					90					95		
Val	Phe	Ala	Pro	Tyr	Thr	Asn	Val	Thr	Asp	Val	Arg	Trp	Val	Gln	Glu
		100						105					110		
Glu	Pro	Glu	Asn	Gln	Gly	Ala	Trp	Tyr	Tyr	Met	Leu	Thr	His	Leu	Pro
		115				120						125			
Gln	Ala	Met	Ser	Glu	Lys	Leu	Pro	Gly	Phe	Phe	Asp	Gly	Leu	Val	Gly
	130					135					140				
Ile	Thr	Arg	Pro	Pro	Ser	Ser	Ala	Pro	Ser	Val	Gly	Gln	His	Ser	Val
145				150					155					160	
His	Ile	Arg	Glu	Glu	Gln	Glu	Leu	Leu	Glu	Lys	Ala	Ile	Ala		
			165					170							

<210> 829

<211> 492

<212> DNA

<213> Homo sapiens

<400> 829

nagtggccgg gtggccggcg ggtgccagcc gccatggagg ccgtgccccg catgccccatg
60
atctggctgg acctgaagga ggccggtgac tttcacttcc agccagctgt gaagaagttt
120
gtcctgaaga attatggaga gaaccagaa gcctacaatg aagaactgaa gaagctggag
180
ttgctcagac agaatgctgt ccgtgtccca cgagactttg agggctgtag tgtcctccgc
240
aagtacctcg gccagcttca ttacctgcag agtcgggtcc ccatgggctc gggccaggag
300
gccgctgtcc ctgtcacatg gacagagatc ttctcaggca agtctgtggc ccatgaggac
360
atcaagtacg agcaggcctg tttttctcc aacnttggag cgctgcactc catgctgggg
420
gccatggaca agcgggtgtc tgaggagggc atgaaggtct cctgtaccca tttccagtgc
480

gcagccggcg cc
492

<210> 830
<211> 164
<212> PRT
<213> Homo sapiens

<400> 830
Xaa Trp Pro Gly Gly Arg Arg Val Pro Ala Ala Met Glu Ala Val Pro
1 5 10 15
Arg Met Pro Met Ile Trp Leu Asp Leu Lys Glu Ala Gly Asp Phe His
20 25 30
Phe Gln Pro Ala Val Lys Lys Phe Val Leu Lys Asn Tyr Gly Glu Asn
35 40 45
Pro Glu Ala Tyr Asn Glu Glu Leu Lys Lys Leu Glu Leu Leu Arg Gln
50 55 60
Asn Ala Val Arg Val Pro Arg Asp Phe Glu Gly Cys Ser Val Leu Arg
65 70 75 80
Lys Tyr Leu Gly Gln Leu His Tyr Leu Gln Ser Arg Val Pro Met Gly
85 90 95
Ser Gly Gln Glu Ala Ala Val Pro Val Thr Trp Thr Glu Ile Phe Ser
100 105 110
Gly Lys Ser Val Ala His Glu Asp Ile Lys Tyr Glu Gln Ala Cys Ile
115 120 125
Phe Ser Asn Xaa Gly Ala Leu His Ser Met Leu Gly Ala Met Asp Lys
130 135 140
Arg Val Ser Glu Glu Gly Met Lys Val Ser Cys Thr His Phe Gln Cys
145 150 155 160
Ala Ala Gly Ala

<210> 831
<211> 303
<212> DNA
<213> Homo sapiens

<400> 831
gcgttgctgc ggcgtggcga gaccatgacg gcggagaatc agcgtgccaa tgtgcgcac
60
gccgcaaacc acatcaagga ggttgcggtc gatcacgagg tcgttgtagc ccatggta
120
ggccccagg taggtctgtt ggctctgcaa tcgacagcct acgaggaagt cggtatctat
180
ccgctggatg tcctgggcgc agagtcacag gccatgatcg gctacatgat cgagcaggaa
240
ctcggcaatg tgatgcctca ggatcagcag atcgtcacca tgatcacgat gacagtcgtc
300
gac
303

<210> 832
<211> 101
<212> PRT

<213> Homo sapiens

<400> 832

```

Ala Leu Leu Arg Arg Gly Glu Thr Met Thr Ala Glu Asn Gln Arg Ala
 1             5             10             15
Asn Val Arg Ile Ala Ala Asn His Ile Lys Glu Val Ala Val Asp His
      20             25             30
Glu Val Val Val Ala His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala
      35             40             45
Leu Gln Ser Thr Ala Tyr Glu Glu Val Gly Ile Tyr Pro Leu Asp Val
      50             55             60
Leu Gly Ala Glu Ser Gln Ala Met Ile Gly Tyr Met Ile Glu Gln Glu
      65             70             75             80
Leu Gly Asn Val Met Pro Gln Asp Gln Gln Ile Val Thr Met Ile Thr
      85             90             95
Met Thr Val Val Asp
      100

```

<210> 833

<211> 466

<212> DNA

<213> Homo sapiens

<400> 833

```

nngatccgcg cgatcgacga ggcggtgctg tgatgttgac agcgaaaatg cgcagccggc
60
catttgacga gggtgaaaa cgtcttctac cggctctgctg tgccgcctgg tgtcagcaaa
120
cgacgccatg atcgctccagt gggatcgcgt ttgttctgctg gcgctggggg attcagttgc
180
ggattccacc aggcggggtg gcatgttgctg gcggcggttg agcacgacgt gtcggcgtct
240
ctgacctatg tcatgaatct cgctcggccc ggctgcaaga ttcacatcga ccccgagcac
300
ccggagctgg gccaagacc accgcgaacc aagaagaaga gcggcgggcg agtgccgttc
360
gatcgcatg tcggaactgg gtggatcgcc agcgagcccg ccgacgatcc cggtgcgaa
420
catttctacg tgtacgacgt caagaacctc agcggcgagc ggatcc
466

```

<210> 834

<211> 142

<212> PRT

<213> Homo sapiens

<400> 834

```

Gln Arg Lys Cys Ala Ala Gly His Leu Thr Arg Ala Glu Asn Val Phe
 1             5             10             15
Tyr Arg Ser Ala Val Pro Pro Gly Val Ser Lys Arg Arg His Asp Arg
      20             25             30
Pro Val Gly Ile Asp Leu Phe Cys Gly Ala Gly Gly Phe Ser Cys Gly
      35             40             45
Phe His Gln Ala Gly Trp His Val Ala Ala Ala Val Glu His Asp Val

```

```

      50              55              60
Ser Ala Ser Leu Thr Tyr Val Met Asn Leu Ala Arg Pro Gly Val Lys
65              70              75              80
Ile His Ile Asp Pro Glu His Pro Glu Leu Gly Pro Arg Pro Pro Arg
      85              90              95
Thr Lys Lys Lys Ser Gly Gly Ala Val Pro Phe Asp Ala His Val Gly
      100              105              110
Thr Gly Trp Ile Ala Ser Glu Pro Ala Asp Asp Pro Gly Cys Glu His
      115              120              125
Phe Tyr Val Tyr Asp Val Lys Asn Leu Ser Gly Glu Arg Ile
      130              135              140

```

<210> 835
 <211> 482
 <212> DNA
 <213> Homo sapiens

```

<400> 835
acgcgtgaag ggattttgat caccagaac aaccacctgt ctttttagat caagaagcag
60
aagctcagag caaagaacat cacaccacgt ccctcagtga ttgaagcagt gattgagtca
120
cagaataaat ctggaactca ggtcttctga tctttgctcc agatgtaga gacaaaacta
180
aaagtaaaat accaagtga atcaaagcat cacgattgag ccagaacat gaaaaagaac
240
ttcctggccc acttgagaaa ctgttaaacc ggacatacct ttggggactt cttcccttct
300
ctggaataag attgatgttt ccattgctgtg aaagaagatg atgttccttc tcccagattc
360
ctgctgtctt caaaaggcct agcaaaaacc actgctgctg ggtgcagttg agaaagggaa
420
tgaagaacaa tcccatggcc atgcaggcac tcctcccttc cacctctctg cccttcacgc
480
gt
482

```

<210> 836
 <211> 120
 <212> PRT
 <213> Homo sapiens

```

<400> 836
Met Ala Met Gly Leu Phe Phe Ile Pro Phe Leu Asn Cys Thr Gln Gln
1      5      10      15
Gln Trp Phe Leu Leu Gly Leu Leu Lys Thr Ala Gly Ile Trp Glu Lys
      20      25      30
Glu His His Arg Leu Ser Gln His Gly Asn Ile Asn Leu Ile Pro Glu
      35      40      45
Lys Gly Arg Ser Pro Gln Arg Tyr Val Arg Phe Asn Ser Phe Ser Ser
      50      55      60
Gly Pro Gly Ser Ser Phe Ser Cys Ser Gly Leu Asn Arg Asp Ala Leu
65      70      75      80
Ile Ser Leu Gly Ile Leu Leu Leu Val Leu Ser Leu Thr Ser Gly Ala

```


	85		90		95
Lys Ile Arg Arg Pro Glu Phe Gln Ile Tyr Ser Val Thr Gln Ser Leu					
	100		105		110
Leu Gln Ser Leu Arg Asp Val Val					
	115		120		

<210> 837

<211> 509

<212> DNA

<213> Homo sapiens

<400> 837

acgcgtggac ccccgttctg cccgcctttg cagtcacgc cctccctgaa gtcaccgctg
60
cagaaatacg caggcactga cctgggggta cagccaggca agggagagac gaggggctca
120
ctctgcacca gccaaaggcct gtgtcctggc atggctcccc caggaagcga ggatggcggt
180
gcctggcggt cgagccctc ttatcctggg gaatgctggg gggcgcttct gagcagacct
240
gcctgctgcc cctgctggct ggcactgccc ctccccggg gaaaggttg gtggtcccc
300
caggggaact caaagcagg gagccctgg aggcccaag tccctggaat atcttggcgc
360
tcagatggcc cccctcgaac accctcacac gggggggccg cgcggtggga ggtgacctag
420
cagccactct tacttggcga agacttttct cccaatgca gcgcgggttg tatcagcctg
480
agccttcagg ttggtgaggc tgggggtacc
509

<210> 838

<211> 119

<212> PRT

<213> Homo sapiens

<400> 838

Met Ala Pro Pro Gly Ser Glu Asp Gly Gly Ala Trp Arg Ser Ser Pro					
1	5		10		15
Ser Tyr Pro Gly Glu Cys Trp Gly Ala Phe Leu Ser Arg Pro Ala Cys					
	20		25		30
Cys Pro Cys Trp Leu Ala Leu Pro Leu Pro Arg Gly Lys Val Gly Trp					
	35		40		45
Ser Pro Gln Gly Asn Ser Lys Gln Gly Ser Pro Trp Arg Pro Gln Val					
	50		55		60
Pro Gly Ile Ser Trp Arg Ser Asp Gly Pro Pro Arg Thr Pro Ser His					
65	70		75		80
Gly Gly Ala Ala Arg Trp Glu Val Thr Gln Gln Pro Leu Leu Gly					
	85		90		95
Glu Asp Phe Ser Pro Asn Ala Ser Ala Gly Gly Ile Ser Leu Ser Leu					
	100		105		110
Gln Val Gly Glu Ala Gly Val					
	115				

<210> 839
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 839
 acgcgtctcg tgttcgtgcg gcacggcagg acggcggttca atgtggaggg tcggctccag
 60
 ggccgtctcg acatgccggtt ggatgaggtg gggcgccgtc aggcactcac agtggctcaa
 120
 gtcacgccc agatggaacc tgacgcgac atggcctctc cgctacaacg tgcgcgcgac
 180
 acagctcagg caatcgggtgc ttgtgctgga ttgggcgtac agctggatga tcgactcatc
 240
 gagatcgatg tcggacgttg gtcgggacaa cgggctgcgg acctgcgtcg caacgatcct
 300
 gagtacgcag caagtgtggt cagccctatc gattaccggg tcggagn
 347

<210> 840
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 840
 Thr Arg Leu Val Phe Val Arg His Gly Arg Thr Ala Phe Asn Val Glu
 1 5 10 15
 Gly Arg Leu Gln Gly Arg Leu Asp Met Pro Leu Asp Glu Val Gly Arg
 20 25 30
 Arg Gln Ala Leu Thr Val Ala Gln Val Ile Ala Glu Met Glu Pro Asp
 35 40 45
 Ala Ile Met Ala Ser Pro Leu Gln Arg Ala Arg Asp Thr Ala Gln Ala
 50 55 60
 Ile Gly Ala Cys Ala Gly Leu Gly Val Gln Leu Asp Asp Arg Leu Ile
 65 70 75 80
 Glu Ile Asp Val Gly Arg Trp Ser Gly Gln Arg Ala Ala Asp Leu Arg
 85 90 95
 Arg Asn Asp Pro Glu Tyr Ala Ala Ser Val Val Ser Pro Ile Asp Tyr
 100 105 110
 Arg Val Gly
 115

<210> 841
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 841
 tccggaactc accccgacgc cgtcattatg gacgtcatga tgccgcgtct agatggcttg
 60
 gaagccaccc ggatgctgcg cagcaatggc aacgacgtcc cgatcctcgt cctcaccgcc
 120
 cgcgatgctg tcgacgatcg cggttgacggc ctcgacgctg gcgcgatga ctacatggtc
 180

aagcccttcg ccctcgacga actcctcgtc cgcctacgcg ccctcactcg tcgttcccgt
 240
 cccgagccag agcaaaacga ggccccctgaa caactctcct tcgctgacct cacccttgat
 300
 ccaggcaccg gcgagatcac ccgcgggaac cgtcgcatca gtttgacgcg t
 351

<210> 842

<211> 117

<212> PRT

<213> Homo sapiens

<400> 842

Ser	Gly	Thr	His	Pro	Asp	Ala	Val	Ile	Met	Asp	Val	Met	Met	Pro	Arg
1				5				10						15	
Leu	Asp	Gly	Leu	Glu	Ala	Thr	Arg	Met	Leu	Arg	Ser	Asn	Gly	Asn	Asp
			20					25					30		
Val	Pro	Ile	Leu	Val	Leu	Thr	Ala	Arg	Asp	Ala	Val	Asp	Asp	Arg	Val
		35					40					45			
Asp	Gly	Leu	Asp	Ala	Gly	Ala	Asp	Asp	Tyr	Met	Val	Lys	Pro	Phe	Ala
	50					55					60				
Leu	Asp	Glu	Leu	Leu	Ala	Arg	Leu	Arg	Ala	Leu	Thr	Arg	Arg	Ser	Arg
65					70					75					80
Pro	Glu	Pro	Glu	Gln	Asn	Glu	Ala	Pro	Glu	Gln	Leu	Ser	Phe	Ala	Asp
				85						90				95	
Leu	Thr	Leu	Asp	Pro	Gly	Thr	Arg	Glu	Ile	Thr	Arg	Gly	Asn	Arg	Arg
			100					105					110		
Ile	Ser	Leu	Thr	Arg											
			115												

<210> 843

<211> 393

<212> DNA

<213> Homo sapiens

<400> 843

ctagcccagg ctctcgtcca cgaggggctg cgcgctgtgg cctctggggc aaaccogggc
 60
 ggccctcaagc gcggtatcga gaaggctgtc gacgccgttg tggaggagct ccgctctatc
 120
 tcgcgcgcca tcgacaccac ctccgacatg gccagcgttg ccaccatctc cagccgtgac
 180
 gagaccatcg gcgccctcat cgctgaggcc ttcgacaagg ttggttaagga cgggggttacc
 240
 accgtcgacg agtcgcagac ctccggcact gagcttgact tcaccgaggg catgcagttc
 300
 gacaagggtt acctgtcgcc ctacatgggc accgaccagg ttcgcatgga ggctgtgac
 360
 gaggatcctt acatcctcat tcaactccgc aag
 393

<210> 844

<211> 131

<212> PRT

<213> Homo sapiens

<400> 844

```

Leu Ala Gln Ala Leu Val His Glu Gly Leu Arg Ala Val Ala Ser Gly
 1           5           10           15
Ala Asn Pro Val Gly Leu Lys Arg Gly Ile Glu Lys Ala Val Asp Ala
      20           25           30
Val Val Glu Glu Leu Arg Ser Ile Ser Arg Ala Ile Asp Thr Thr Ser
      35           40           45
Asp Met Ala Ser Val Ala Thr Ile Ser Ser Arg Asp Glu Thr Ile Gly
      50           55           60
Ala Leu Ile Ala Glu Ala Phe Asp Lys Val Gly Lys Asp Gly Val Ile
65           70           75           80
Thr Val Asp Glu Ser Gln Thr Phe Gly Thr Glu Leu Asp Phe Thr Glu
      85           90           95
Gly Met Gln Phe Asp Lys Gly Tyr Leu Ser Pro Tyr Met Val Thr Asp
      100          105          110
Gln Val Arg Met Glu Ala Val Ile Glu Asp Pro Tyr Ile Leu Ile His
      115          120          125
Ser Arg Lys
      130

```

<210> 845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 845

```

gccacctgcc caaggctgga tgacgggcct agggcacatc taaggaacaa ggacaggaca
60
gaagcaaagc cacagctgct ggggcagggg gggggccggg atgtctggcc agcagcatca
120
cccctgcccc cggcggggct ccaggaccgg gagactcatc agccggaagc tcttgaggga
180
ggcggctgcc gtgaagacag gcacccttgc tcctgagagg ggcaccaga gaaccaagac
240
tcagcagagg gaacacaggg ctacgcccag gccccaggcc tgatatccag agtctaaatc
300
ccacctcagc ccagggggga gccttgagag gagctatgtc cctcatggac cccagtttcc
360
tctgcatacg ggctccgagc cctgcactgc ctccagggtg gttcccaagg tcttttccca
420
ttacctccta cgtgagcact cagtaaacca atacacatac acaagggtga cattaattcc
480
agccacagaa tcccaggcca cgcgt
505

```

<210> 846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 846

```

Met Gly Lys Asp Leu Gly Asn Tyr Pro Gly Gly Ser Ala Gly Leu Gly

```

```

      1             5             10             15
Ala Arg Met Gln Arg Lys Leu Gly Ser Met Arg Asp Ile Ala Pro Leu
      20             25             30
Lys Ala Pro Pro Trp Ala Glu Val Gly Phe Arg Leu Trp Ile Ser Gly
      35             40             45
Leu Gly Pro Gly Arg Ser Pro Val Phe Pro Leu Leu Ser Leu Gly Ser
      50             55             60
Leu Gly Ala Pro Leu Arg Ser Lys Gly Ala Cys Leu His Gly Ser Arg
      65             70             75             80
Leu Leu Gln Glu Leu Pro Ala Asp Glu Ser Pro Gly Pro Gly Ala Pro
      85             90             95
Pro Gly Ala Gly Val Met Leu Leu Ala Arg His Thr Gly Pro His Pro
      100            105            110
Ala Pro Ala Ala Val Ala Leu Leu Leu Ser Cys Pro Cys Ser Leu Asp
      115            120            125
Val Pro
      130

```

<210> 847

<211> 448

<212> DNA

<213> Homo sapiens

<400> 847

```

aagcttttaa aggagcaaga aaacatgaaa gagctagtag tcaaccttct ccgcatgact
60
caaatcaaaa ttgatgaaaa ggaacaaaag tccaaggatt tcttgaaagc tcagcaaaaa
120
tacaccaaca ttgttaaaga aatgaaagca aaggatcttg aaatcaggat acacaagaag
180
aaaaaatgtg aaatttatcg gagactgaga gagcttgcta aactgtatga caccattcga
240
aatgaaagaa acaaatttgt taacttactc cacaaagctc atcagaaagt aaatgaaata
300
aaagaaaggc ataaaatgtc attaaatgaa cttgaaattc tgagaaatag tgccgttagt
360
caagaaagaa agctacaaaa ttccatgctg aaacacgcca acaatgttac catcagagag
420
agcatgcaaa acgatgtgcg caaaattt
448

```

<210> 848

<211> 149

<212> PRT

<213> Homo sapiens

<400> 848

```

Lys Leu Leu Lys Glu Gln Glu Asn Met Lys Glu Leu Val Val Asn Leu
      1             5             10             15
Leu Arg Met Thr Gln Ile Lys Ile Asp Glu Lys Glu Gln Lys Ser Lys
      20             25             30
Asp Phe Leu Lys Ala Gln Gln Lys Tyr Thr Asn Ile Val Lys Glu Met
      35             40             45
Lys Ala Lys Asp Leu Glu Ile Arg Ile His Lys Lys Lys Lys Cys Glu

```

```

      50              55              60
Ile Tyr Arg Arg Leu Arg Glu Leu Ala Lys Leu Tyr Asp Thr Ile Arg
65              70              75              80
Asn Glu Arg Asn Lys Phe Val Asn Leu Leu His Lys Ala His Gln Lys
      85              90              95
Val Asn Glu Ile Lys Glu Arg His Lys Met Ser Leu Asn Glu Leu Glu
      100              105              110
Ile Leu Arg Asn Ser Ala Val Ser Gln Glu Arg Lys Leu Gln Asn Ser
      115              120              125
Met Leu Lys His Ala Asn Asn Val Thr Ile Arg Glu Ser Met Gln Asn
      130              135              140
Asp Val Arg Lys Ile
145

```

<210> 849
 <211> 463
 <212> DNA
 <213> Homo sapiens

```

<400> 849
nnacgcgtga ttgttggggc caaggaatgc catgtggaga gtgcaggtga agtgataagt
60
cttttggaga tggggaatgc agccagacat acaggtacca ctcaaatgaa tgagcactcc
120
agcagatcac atgcaatttt tacaatcagc atttgtcaag ttcataaaaa tatggaggca
180
gctgaagatg gatcatggta ttccctcgg catattgtct caaagttcca ctttgtggat
240
ttggcaggat cagaaagagt aacaaaaacg gggaatactg gtgaacggtt caaagaatcc
300
attcaaatca atagtggatt gctggcttta ggaaatgtaa taagcgctct tggggaccca
360
cgcaggaaga gttcacatat tccatatagg gatgctaaaa ttaccgggt tctgaaagat
420
tctctgggag gcagtgctaa gactgtcatg atcacatgtg tca
463

```

<210> 850
 <211> 154
 <212> PRT
 <213> Homo sapiens

```

<400> 850
Xaa Arg Val Ile Val Gly Ala Lys Glu Cys His Val Glu Ser Ala Gly
1              5              10              15
Glu Val Ile Ser Leu Leu Glu Met Gly Asn Ala Ala Arg His Thr Gly
      20              25              30
Thr Thr Gln Met Asn Glu His Ser Ser Arg Ser His Ala Ile Phe Thr
      35              40              45
Ile Ser Ile Cys Gln Val His Lys Asn Met Glu Ala Ala Glu Asp Gly
      50              55              60
Ser Trp Tyr Ser Pro Arg His Ile Val Ser Lys Phe His Phe Val Asp
65              70              75              80
Leu Ala Gly Ser Glu Arg Val Thr Lys Thr Gly Asn Thr Gly Glu Arg

```

```

      85              90              95
Phe Lys Glu Ser Ile Gln Ile Asn Ser Gly Leu Leu Ala Leu Gly Asn
      100              105              110
Val Ile Ser Ala Leu Gly Asp Pro Arg Arg Lys Ser Ser His Ile Pro
      115              120              125
Tyr Arg Asp Ala Lys Ile Thr Arg Leu Leu Lys Asp Ser Leu Gly Gly
      130              135              140
Ser Ala Lys Thr Val Met Ile Thr Cys Val
145              150

```

<210> 851
 <211> 372
 <212> DNA
 <213> Homo sapiens

```

<400> 851
aaatttcctg tttctgatcg acgaaataaa gtttagcgtg atgagtgagc tgcttatgca
60
gttcctccat tcgcttataa acagttttat ttctcatttc gaaaactctc gatgcagaat
120
aaaggctaga gtctggggac caagtcccca gtcctgttta cgcgacttcc ttgaccttgt
180
ttgttatgct gataaggtta ttcagcttga cgatttggtc gtggtctttc aaccggtttg
240
cagctggctg acgatattcc tggtaggaac tacgatagaa gaccagcatc ggaagaactt
300
tgtagatgct gaacaaacac ccaccgatca cttcagcctc gaagtaaggg ttatactgtc
360
taaccacgc gt
372

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<210> 852
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 852
Met Ser Glu Leu Leu Met Gln Phe Leu His Ser Leu Ile Asn Ser Phe
  1              5              10              15
Ile Ser His Phe Glu Asn Ser Arg Cys Arg Ile Lys Ala Arg Val Trp
      20              25              30
Gly Pro Ser Pro Gln Leu Arg Leu Arg Asp Phe Leu Asp Leu Val Cys
      35              40              45
Tyr Ala Asp Lys Val Ile Gln Leu Asp Asp Leu Phe Val Val Phe Gln
      50              55              60
Pro Phe Cys Ser Trp Ser Thr Ile Phe Leu Val Gly Thr Thr Ile Glu
      65              70              75              80
Asp Gln His Arg Lys Asn Phe Val Asp Ala Glu Gln Thr Pro Thr Asp
      85              90              95
His Phe Ser Leu Glu Val Arg Val Ile Leu Ser Asn Pro Arg
      100              105              110

```

<210> 853
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 853

acgcgttcag aaacttatgg tgaaatggcc gaactagaaa acctagtcga cgaatattac
 60
 caagctatgg gcatggatgt gcgtcgagaa acctggctgc gcgagcagat actcaagaaa
 120
 gtccaagaaa cgcatttggt agaagagctt gcaggcatag aatcaggtga tgatggcgca
 180
 gtgggtggaag agagcgtatt agaaggcctc gatacctatt tatgtgagat aaaagaagca
 240
 cagattcgtc atggattgca tcgtcttggga gaattaccag aagacgataa attggccgat
 300
 accttggtcg ccttattgcg ttacccccgt ggcagtgaca ttaccagcaa gggaattttg
 360
 catgccttaa tggcagatatt agagttagaa caagacgatt ttgacccaat gcaaagcacg
 420
 cgt
 423

<210> 854

<211> 141

<212> PRT

<213> Homo sapiens

<400> 854

Thr	Arg	Ser	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Glu	Leu	Glu	Asn	Leu	Val
1				5					10					15	
Asp	Glu	Tyr	Tyr	Gln	Ala	Met	Gly	Met	Asp	Val	Arg	Arg	Glu	Thr	Trp
			20				25						30		
Leu	Arg	Glu	Gln	Ile	Leu	Lys	Lys	Val	Gln	Glu	Thr	His	Leu	Leu	Glu
		35				40						45			
Glu	Leu	Ala	Gly	Ile	Glu	Ser	Gly	Asp	Asp	Gly	Ala	Val	Val	Glu	Glu
	50					55					60				
Ser	Val	Leu	Glu	Gly	Leu	Asp	Thr	Tyr	Leu	Cys	Glu	Ile	Lys	Glu	Ala
65				70					75					80	
Gln	Ile	Arg	His	Gly	Leu	His	Arg	Leu	Gly	Glu	Leu	Pro	Glu	Asp	Asp
			85					90						95	
Lys	Leu	Ala	Asp	Thr	Leu	Val	Ala	Leu	Leu	Arg	Leu	Pro	Arg	Gly	Ser
			100				105						110		
Asp	Ile	Thr	Ser	Lys	Gly	Ile	Leu	His	Ala	Leu	Met	Ala	Asp	Leu	Glu
		115				120						125			
Leu	Glu	Gln	Asp	Asp	Phe	Asp	Pro	Met	Gln	Ser	Thr	Arg			
	130					135						140			

<210> 855

<211> 338

<212> DNA

<213> Homo sapiens

<400> 855

acgcgtgaag ggggagctca aagtagatgg acctctgact agatggagct ctgagtaaga
 60

tgaatgtctg tgcggatgtt gctcacagca agatagtgtt tggagcgatt ggcacttcga
 120
 acaagatgga gcatggagca gatggagctc tgagcaagat ggagcgtgga gtagatagag
 180
 cttggagcaa gaaggagctc caagcaagat ggagcttgca gcaggtgctt ctcaagttaa
 240
 gatggagctc agagaagatg atgctcagag taagattgag ctcggtgatt ggcactccaa
 300
 acattgctct gagccattg gagnctctga gcagaaag
 338

<210> 856

<211> 93

<212> PRT

<213> Homo sapiens

<400> 856

Met	Asn	Val	Cys	Ala	Asp	Val	Ala	His	Ser	Lys	Ile	Val	Leu	Gly	Ala
1				5					10					15	
Ile	Gly	Thr	Ser	Asn	Lys	Met	Glu	His	Gly	Ala	Asp	Gly	Ala	Leu	Ser
			20					25					30		
Lys	Met	Glu	Arg	Gly	Val	Asp	Arg	Ala	Trp	Ser	Lys	Lys	Glu	Leu	Gln
		35				40					45				
Ala	Arg	Trp	Ser	Leu	Gln	Gln	Val	Leu	Leu	Ser	Val	Arg	Trp	Ser	Ser
	50				55					60					
Glu	Lys	Met	Met	Leu	Arg	Val	Arg	Leu	Ser	Ser	Val	Ile	Gly	Thr	Pro
65				70					75					80	
Asn	Ile	Ala	Leu	Ser	Pro	Leu	Glu	Xaa	Leu	Ser	Arg	Lys			
			85						90						

<210> 857

<211> 435

<212> DNA

<213> Homo sapiens

<400> 857

ccggacagtg ggccaccagt gtttgccccc agcaatcatg tcagtgaagc ccaacctcgg
 60
 gagacacccc ggccctctcat gcctcctacc aagcctttcc tagcacctga gaccaccagc
 120
 cctggtgaca ggggtggagac ccctgtgggg gagagagccc caacctctgt ctcaagcaagc
 180
 tctgaggtct ccctgagag ccaagaggac tcagagaccc cagcagagga ggacagtggc
 240
 tctgagcagc ctccaacag cgtcctgcct gacaaactga aggtgagctg ggagaacccc
 300
 agcccccagg aggccctgc tgcagagagt gcagaaccgt cccaggcacc ctgttctgag
 360
 acttctgagg ctgccccag ggaggggtggg aagcccccta caccaccacc caagatctta
 420
 tcagagaaac tgaaa
 435

<210> 858

<211> 145
 <212> PRT
 <213> Homo sapiens

<400> 858
 Pro Asp Ser Gly Pro Pro Val Phe Ala Pro Ser Asn His Val Ser Glu
 1 5 10 15
 Ala Gln Pro Arg Glu Thr Pro Arg Pro Leu Met Pro Pro Thr Lys Pro
 20 25 30
 Phe Leu Ala Pro Glu Thr Thr Ser Pro Gly Asp Arg Val Glu Thr Pro
 35 40 45
 Val Gly Glu Arg Ala Pro Thr Pro Val Ser Ala Ser Ser Glu Val Ser
 50 55 60
 Pro Glu Ser Gln Glu Asp Ser Glu Thr Pro Ala Glu Glu Asp Ser Gly
 65 70 75 80
 Ser Glu Gln Pro Pro Asn Ser Val Leu Pro Asp Lys Leu Lys Val Ser
 85 90 95
 Trp Glu Asn Pro Ser Pro Gln Glu Ala Pro Ala Ala Glu Ser Ala Glu
 100 105 110
 Pro Ser Gln Ala Pro Cys Ser Glu Thr Ser Glu Ala Ala Pro Arg Glu
 115 120 125
 Gly Gly Lys Pro Pro Thr Pro Pro Pro Lys Ile Leu Ser Glu Lys Leu
 130 135 140
 Lys
 145

<210> 859
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 859
 nacgcgtggt gtggtaatcc ggtttctggt ggcgacggct gccaccctc gtggcaagac
 60
 atgccgttgc gtgccgatat gccatacgaa gcttggccta gtgcgaaaag ctcgctggaa
 120
 ccctcgaaga ggcagggtcg gcagggtacc gtggtcggtg tacgcacgtt ttcgacgatg
 180
 aaccccatc tgggagcaga tatgacgacg taccagtacc tcattgtcgg tggcgggatg
 240
 gccgctgatt ctgccgcccg cggatatccg gacatcgaca agaaaggggc gatcgccatc
 300
 ctgagcgctg acgtcgacgc cccgtatcct cggccagcgc tgagcaagaa gctgtggact
 360
 gaccctgagt tcacctggga ccaggtcgac cttgctactg tcgctgacac cggcgcgga
 420
 ttgcggctcg gcactgaggt gctcagcatt gaccgtgacg gcaagaccgt cctgaccgct
 480
 tccggccagg tattcggcta ccagaagttg ctgctcgta cggccttac cccgtcgcg
 540
 attgacgacg acggcgatgc c
 561

<210> 860

<211> 187
 <212> PRT
 <213> Homo sapiens

<400> 860
 Xaa Ala Trp Cys Gly Asn Pro Val Ser Gly Gly Asp Gly Cys His Pro
 1 5 10 15
 Ser Trp Gln Asp Met Pro Leu Arg Ala Asp Met Pro Tyr Glu Ala Trp
 20 25 30
 Pro Ser Ala Lys Ser Ser Leu Glu Pro Ser Lys Arg Gln Gly Arg Gln
 35 40 45
 Val Thr Val Val Gly Val Arg Ile Val Ser Thr Met Asn Pro Ile Leu
 50 55 60
 Gly Ala Asp Met Thr Thr Tyr Gln Tyr Leu Ile Val Gly Gly Gly Met
 65 70 75 80
 Ala Ala Asp Ser Ala Ala Arg Gly Ile Arg Asp Ile Asp Lys Lys Gly
 85 90 95
 Ser Ile Ala Ile Leu Ser Ala Asp Val Asp Ala Pro Tyr Pro Arg Pro
 100 105 110
 Ala Leu Ser Lys Lys Leu Trp Thr Asp Pro Glu Phe Thr Trp Asp Gln
 115 120 125
 Val Asp Leu Ala Thr Val Ala Asp Thr Gly Ala Glu Leu Arg Leu Gly
 130 135 140
 Thr Glu Val Leu Ser Ile Asp Arg Asp Gly Lys Thr Val Leu Thr Ala
 145 150 155 160
 Ser Gly Gln Val Phe Gly Tyr Gln Lys Leu Leu Leu Val Thr Gly Leu
 165 170 175
 Thr Pro Ser Arg Ile Asp Asp Asp Gly Asp Ala
 180 185

<210> 861
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 861
 ccattgggttt ctatgctctg aggttttcac tgtggggaac agtattgact tacttacaaa
 60
 gagataatgg tcatacccta tggtcactca ccatagtctg gcggtacatg gacttctcag
 120
 cccagtaag atctgtatcc acaggacact taaagtcacc ttacagaggg ctatcccagt
 180
 gcctgaggcc tattagaggc gtctcttttc agccatcagt gttagaggcc atctgcatgg
 240
 gatccagag cctgcctcgg gaatggcaga agctggctgg tgcttggcgt gggctttgcc
 300
 tgtttactg ctttcaggga ggcctgccac aggggagaaa ctgggggggg ga
 352

<210> 862
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 862

Met Gly Phe Tyr Ala Leu Arg Phe His Leu Trp Gly Thr Val Leu Thr
 1 5 10 15
 Tyr Leu Gln Arg Asp Asn Gly His Thr Leu Trp Ser Leu Thr Ile Val
 20 25 30
 Trp Arg Tyr Met Asp Phe Ser Ala Pro Val Arg Ser Val Ser Thr Gly
 35 40 45
 His Leu Lys Ser Pro Tyr Arg Gly Leu Ser Gln Cys Leu Arg Pro Ile
 50 55 60
 Arg Gly Val Ser Phe Gln Pro Ser Val Leu Glu Ala Ile Cys Met Gly
 65 70 75 80
 Ser Gln Ser Leu Pro Arg Glu Trp Gln Lys Leu Ala Gly Ala Trp Arg
 85 90 95
 Gly Leu Cys Leu Phe His Cys Phe Gln Gly Gly Leu Pro Gln Gly Arg
 100 105 110
 Asn Trp Gly Gly
 115

<210> 863

<211> 327

<212> DNA

<213> Homo sapiens

<400> 863

tccggatcga cccggacgaa ttccacgggc cagccattga cttccaaatg ctctttgaca
 60
 tacgcccgtga catgttcaat gtccaactta cgcattgtcca cccgctcacc ggtctcattg
 120
 agtttgagct gcgagtagac gttgcggtag ttctcgttga ccgactgctc atacgagatg
 180
 tgcagaagca tcggtttgcg gccatcctcg gacggcattg gcttggttgta catggccgct
 240
 tggcggaaca tgttcagggt aaagcccgcac ttgaagttgt gcgacagggc agaaacacac
 300
 agcatttctg accggcgatg acccatn
 327

<210> 864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 864

Met Gly His Arg Arg Ser Glu Met Leu Cys Val Ser Ala Leu Ser His
 1 5 10 15
 Asn Phe Lys Ser Gly Phe Thr Leu Asn Met Phe Arg Gln Ala Ala Met
 20 25 30
 Tyr Asn Lys Pro Met Pro Ser Glu Asp Gly Arg Lys Pro Met Leu Leu
 35 40 45
 His Ile Ser Tyr Glu Gln Ser Val Asn Glu Asn Tyr Arg Asn Val Tyr
 50 55 60
 Ser Gln Leu Lys Leu Asn Glu Thr Gly Glu Arg Val Asp Met Arg Lys
 65 70 75 80
 Leu Asp Ile Glu His Val Thr Ala Tyr Val Lys Glu His Leu Glu Val

85 90 95
 Asn Gly Trp Thr Val Glu Phe Val Arg Val Asp Pro
 100 105

<210> 865
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 865
 acgcgtcatc ctcattcaag aggcccagga ggagcaccac cctccgcata ttgcgcgtgc
 60
 agctctcgtt ctggtctctg agcatgcccc cggcgctctg cacacagctt ctcagcagcc
 120
 tgggtggtgc caggatcgac acatcactgc ctccgagttc agagggtttcc tttcccaact
 180
 tctcagaact ttctgtttcc atggcctcct ctgccacctc tgccacctcc cctgatgtgc
 240
 tggcctccgt ctccatcgcc tctcatggc cgtcttccgc ccggtgttcc aagcccagct
 300
 caggcaagtc tccgggcgcg aacagctggc tgatggtgac atgctgcagc ctggtcacat
 360
 cagaaacat gaggggtggat ctccggagggt catcgatgtg gacagactgc cacagccctc
 420
 cgtggaagcc cacataggct gttcctcttc ccaccggga cagttttgtg atgaaataga
 480
 cgaagatacg gtctcattt tctcgtattt tgttgatttc atttataaca gaatacttag
 540
 ctgaggcaat gagctgggcg ctacggattc catcttcaaa atctgtctga aaaatgagga
 600
 ttttacattt ggctgtattc gttaaacagt ttcggacttc tttgaggaat gagtactcgg
 660
 tgtcaaaactg ctgcagccac aggagtgtgg gtttcggagc cctgcctgtg acctctgatt
 720
 ctaaaattt
 729

<210> 866
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 866
 Ala Cys Pro Arg Arg Ser Ala His Ser Phe Ser Ala Ala Trp Trp Cys
 1 5 10 15
 Pro Gly Ser Thr His His Cys Leu Arg Val Gln Arg Phe Pro Phe Pro
 20 25 30
 Pro Ser Gln Asn Phe Leu Phe Pro Trp Pro Pro Leu Pro Pro Leu Pro
 35 40 45
 Pro Pro Leu Met Cys Trp Pro Pro Ser Pro Ser Pro Pro His Gly Arg
 50 55 60
 Leu Pro Pro Gly Val Pro Ser Pro Ala Gln Ala Ser Leu Arg Ala Arg
 65 70 75 80
 Thr Ala Gly

<210> 867
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 867
 nntccggaac atcaagatcc aggcgcagaa gaccgtcaga agctgcactg gccacctcct
 60
 tcaggtggac tctcgttggt ggccggcgtc gctggccccc tcgcaccggg tcccgtgtca
 120
 catgctccag ggccgagctc ttgtccacct ttacctcacc gaaagccttg tttttgcctc
 180
 ggttaatccc ttcatgagg gctttgatcc aggatccctt ctctcccccg gtgggtgcct
 240
 ggaatttgat gtcgctgacc ttgttccttg gggatcgag caggataaag cgggtgtttc
 300
 gcttgaggag ggcacgaagg tcctggcact tctcatagct gccagctcc acagtctcca
 360
 cacactcttg atcatcctca ttctcataga ccagcagctg ggcttggcag aggagcagat
 420
 atcggctctt ccagaaaccc aggaggcccc cactgctctt cttgatccag ccagccttgt
 480
 ccaccatctg tgctccccga ggctttctac cggtctcctt cacaccctcc tcctccatgg
 540
 cgagtccgcc gaggtccgc cgctccgcca ctgcttcca gcgcgcgcg ggctctgcca
 600
 ccgctctac gcccgccag gcggcgactc tccgcttct
 640

<210> 868
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 868
 Gly Gly His Glu Gly Pro Gly Thr Ser His Ser Cys Pro Ala Pro Gln
 1 5 10 15
 Ser Pro His Thr Ser Asp His Pro His Ser His Arg Pro Ala Ala Gly
 20 25 30
 Pro Gly Arg Gly Ala Asp Ile Gly Leu Ser Arg Asn Pro Gly Gly Pro
 35 40 45
 His Cys Ser Ser
 50

<210> 869
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 869
 ngggtgatgc tgctcgcggc attgagcacc tttgtgtcca gcgcgctgtt tatcgacaac
 60

ttctgtcgc cgctgaatat ggcggggctg ggcttggcga ttctgacggt gggcatcgct
 120
 gcgtgcacca tgctgttctg cctggcgctg gggcatttcg acttgctcgtt gggctcgggtg
 180
 atcgctgtg ccggtgtggt cgcggggatt gtgattcgtg acaccgatag cgtggcactc
 240
 ggcgtgtccg ctgcgttggc catgggcctg gtagtggggc tgatcaacgg catcgtgatc
 300
 gccaaactgc gcatcaacgc g
 321

<210> 870

<211> 107

<212> PRT

<213> Homo sapiens

<400> 870

Xaa	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Ile	Phe	Val	Leu	Ser	Ala	Leu
1				5					10					15	
Phe	Ile	Asp	Asn	Phe	Leu	Ser	Pro	Leu	Asn	Met	Arg	Gly	Leu	Gly	Leu
			20					25					30		
Ala	Ile	Ser	Thr	Val	Gly	Ile	Ala	Ala	Cys	Thr	Met	Leu	Phe	Cys	Leu
			35				40					45			
Ala	Ser	Gly	His	Phe	Asp	Leu	Ser	Val	Gly	Ser	Val	Ile	Ala	Cys	Ala
	50					55					60				
Gly	Val	Val	Ala	Gly	Ile	Val	Ile	Arg	Asp	Thr	Asp	Ser	Val	Ala	Leu
65					70				75					80	
Gly	Val	Ser	Ala	Ala	Leu	Ala	Met	Gly	Leu	Val	Val	Gly	Leu	Ile	Asn
				85				90						95	
Gly	Ile	Val	Ile	Ala	Lys	Leu	Arg	Ile	Asn	Ala					
			100					105							

<210> 871

<211> 320

<212> DNA

<213> Homo sapiens

<400> 871

agatcttcag agtcctcgtc ttttaaattgg gggtaacagc agcaagtcct cagaggtgtc
 60
 ctgagcctca aaacacatcc tggtttgtaa cgtccgcagc ctcagcaggg gctaggcaca
 120
 gaacaagcat tcaggacctg gaaggtacca ggcacacctg gtccctccctt cccaggcaca
 180
 aggcagcccc tctccattca agctctgccc cagcccagca aagagagggg tcctcagcca
 240
 ctgccccac cactaccaca atcatactca cctctcctgg tccatacgtg acaaaggacc
 300
 tgccacggcc agggagacaa
 320

<210> 872

<211> 98

<212> PRT

<213> Homo sapiens

<400> 872

```

Met Gly Val Thr Ala Ala Ser Pro Gln Arg Cys Pro Glu Pro Gln Asn
 1           5           10           15
Thr Ser Trp Phe Val Thr Ser Ala Ala Ser Ala Gly Ala Arg His Arg
 20           25           30
Thr Ser Ile Gln Asp Leu Glu Gly Thr Ser Asp Thr Trp Ser Ser Leu
 35           40           45
Pro Arg His Lys Ala Ala Pro Leu His Ser Ser Ser Ala Pro Ala Gln
 50           55           60
Gln Arg Glu Gly Ser Ser Ala Thr Ala Pro Thr Thr Thr Thr Ile Ile
 65           70           75           80
Leu Thr Ser Pro Gly Pro Tyr Val Thr Lys Asp Leu Pro Arg Pro Gly
 85           90           95
Arg Gln

```

<210> 873

<211> 363

<212> DNA

<213> Homo sapiens

<400> 873

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nttgttttagc atcggtttttt acgggtgtat cagcgcggttt agcagcggttt ttagcggatg
60
catcagcatg ttttgcgta cgtttttacaa ctgtgctacc gtgttttagca tcatttttga
120
cggaggtatc aatacgttta gcatcggtttt taacagatgt atcaacacgg ggttcatccg
180
ctttagcaga atccccagct ctagtagcca ctttagatac ttcagatttt atatgagtcg
240
cagttgtttt agcgtgagcc atgctgaatg tagaaccaag ggccaatgta attgctaaag
300
acaaagataa tttatttagt ttcattgttcg gagagaagtg tgccaattcg gcgatacagt
360
cag
363

```

<210> 874

<211> 108

<212> PRT

<213> Homo sapiens

<400> 874

```

Met Lys Leu Asn Lys Leu Ser Leu Ser Leu Ala Ile Thr Leu Ala Leu
 1           5           10           15
Gly Ser Thr Phe Ser Met Ala His Ala Glu Thr Thr Ala Thr His Ile
 20           25           30
Lys Ser Glu Val Ser Lys Val Ala Thr Arg Ala Gly Asp Ser Ala Lys
 35           40           45
Ala Asp Glu Pro Arg Val Asp Thr Ser Val Lys Asn Asp Ala Lys Arg
 50           55           60
Ile Asp Thr Ser Val Lys Asn Asp Ala Lys His Gly Ser Thr Val Val

```



```

65          70          75          80
Lys Arg Asp Ala Lys His Ala Asp Ala Ser Ala Lys Asn Ala Ala Lys
      85          90          95
Arg Ala Asp Thr Pro Val Lys Asn Asp Ala Lys Gln
    100        105

```

```
<210> 875
<211> 355
<212> DNA
<213> Homo sapiens
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<400> 875
acgcgtgaag gggaccctaa ctcgctctggg ctgtaggatg cgggcgaggc ttccacaaac
60
tcaactgtctg ggggagaaga aaagcagaaa acaactcgaa tcgctaccat tcaggacgaa
120
cccgccaagc accagctcaa gcgcagggtcc ccgggaaaaa gcgcgggctt ctctctccca
180
gcgctcagaa tccctgagcc ggaggccccc cgggattcag accgccagat cccagggag
240
tgacaaatcg ccgcagaaac ttggggggaca actcggccct ggcaccgcgc ggcttcagg
300
cgcggggcagg cgcgcgccaa ctttccccgc gtgccacccc gcggtcctcc cggn
355
```

```
<210> 876
<211> 106
<212> PRT
<213> Homo sapiens
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```

<400> 876
Met Arg Ala Arg Leu Pro Gln Thr His Cys Leu Gly Glu Lys Lys Ser
 1          5          10          15
Arg Lys Gln Leu Glu Ser Leu Pro Phe Arg Thr Asn Pro Pro Ser Thr
          20          25          30
Ser Ser Ser Ala Gly Pro Arg Glu Lys Ala Arg Ala Ser Leu Ser Gln
          35          40          45
Arg Ser Glu Ser Leu Ser Arg Arg Pro Arg Gly Ile Gln Thr Ala Arg
          50          55          60
Ser Pro Gly Ser Asp Lys Ser Pro Gln Lys Leu Gly Gly Gln Leu Gly
65          70          75          80
Pro Gly Thr Ala Arg Leu Pro Gly Ala Gly Arg Arg Ala Pro Thr Phe
          85          90          95
Pro Ala Cys His Pro Ala Ala Pro Pro Ala
          100          105

```

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<210> 877
<211> 487
<212> DNA
<213> Homo sapiens
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<400> 877
acgcgtactt tgggtaatga actgacgacc gctgagatcg actgccttta tctgtgttac
60

caatccacct atgctaaacg tggtcagcaa gggtatctca cacgagaatt ctttggtttg
 120
 ttggccaata ccatgggaga tcaaatacctt ttagtacagg cgtacagaga aggcgaagcg
 180
 atcgccgcgt cgtgggtgtt ctttgatgat cattcactat atgggcgtta ttggggctgt
 240
 atggaagaag tggattgcct gcattttgaa gcttggttatt accaaggaat cgagttttgt
 300
 ctcgaaaaag gggttacagca tttcgatccg ggtacacaag gggaacacaa gattgcgcgc
 360
 ggctttgaac ctgttttttag ccacagcgtg cattacattg ctcacaaagg ttttcgtgaa
 420
 gcgattggga atttctgtga ggaagaagcg caagctgtgc gcgagtatca tcaagatacc
 480
 cacgcgt
 487

<210> 878
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 878
 Thr Arg Thr Leu Gly Asn Glu Leu Thr Thr Ala Glu Ile Asp Cys Leu
 1 5 10 15
 Tyr Leu Cys Tyr Gln Ser Thr Tyr Ala Lys Arg Gly Gln Gln Gly Tyr
 20 25 30
 Leu Thr Arg Glu Phe Phe Gly Leu Leu Ala Asn Thr Met Gly Asp Gln
 35 40 45
 Ile Leu Leu Val Gln Ala Tyr Arg Glu Gly Glu Ala Ile Ala Ala Ser
 50 55 60
 Trp Cys Phe Phe Asp Asp His Ser Leu Tyr Gly Arg Tyr Trp Gly Cys
 65 70 75 80
 Met Glu Glu Val Asp Cys Leu His Phe Glu Ala Cys Tyr Tyr Gln Gly
 85 90 95
 Ile Glu Phe Cys Leu Glu Lys Gly Leu Gln His Phe Asp Pro Gly Thr
 100 105 110
 Gln Gly Glu His Lys Ile Ala Arg Gly Phe Glu Pro Val Phe Ser His
 115 120 125
 Ser Val His Tyr Ile Ala His Gln Gly Phe Arg Glu Ala Ile Gly Asn
 130 135 140
 Phe Cys Glu Glu Glu Ala Gln Ala Val Arg Glu Tyr His Gln Asp Thr
 145 150 155 160
 His Ala

<210> 879
 <211> 993
 <212> DNA
 <213> Homo sapiens

<400> 879
 nncttagcat ttaagccaac gaggcagcta atgtcctctg aacagcaaag gaaattcagc
 60

agccagtcca gtagggctct gacccctcct tcctacagta ctgctaaaaa ttcattggga
 120
 tcaagatcca gtgaatcctt tgggaagtac acatcgccag taatgagtga gcatggggac
 180
 gagcacaggc agctcctctc tcacccaatg caaggccctg gactccgtgc agctacctca
 240
 tccaaccact ctgtggacga gcaactgaag aatactgaca cgcacctcat cgacctggta
 300
 accaatgaga ttatcaccca aggacctcca gtggactgga atgacattgc tggctctgac
 360
 ctggtgaagg ctgtcattaa agaggaggtt ttatggccag tgttgaggtc agacgcgttc
 420
 agtggactga cggccttacc tcggagcatt cttttatttg gacctcgggg gacaggcaaa
 480
 acattattgg gcagatgcat cgctagtcag ctgggggcca cttttttcaa aattgccggt
 540
 tctggactag tcgccaaggg gttaggagaa gcagagaaaa ttatccatgc ctcttttctt
 600
 gtggccaggt gtcgccagcc ctcggtgatt tttgttagtg acattgacat gcttctctcc
 660
 tctcaagtga atgaggaaca tagtccagtc agtcggatga gaaccgaatt tctgatgcaa
 720
 ctggacactg tactaacttc ggctgaggac caaatcgtag taatttgtgc caccagtaaa
 780
 ccagaagaaa tagatgaatc ctttcggagg tacttcatga aacgactttt aatcccactt
 840
 cctgacagca cagcgaggca ccagataata gtacaactgc tctcacagca caattactgt
 900
 ctcaatgaca aggagtgtgc actgctcgtc cagcgcacag aaggcttttc tggactagat
 960
 gtggctcatt tgtgtcagga agcagtgggtg ggc
 993

<210> 880

<211> 331

<212> PRT

<213> Homo sapiens

<400> 880

Xaa	Leu	Ala	Phe	Lys	Pro	Thr	Arg	Gln	Leu	Met	Ser	Ser	Glu	Gln	Gln
1				5					10					15	
Arg	Lys	Phe	Ser	Ser	Gln	Ser	Ser	Arg	Ala	Leu	Thr	Pro	Pro	Ser	Tyr
			20					25					30		
Ser	Thr	Ala	Lys	Asn	Ser	Leu	Gly	Ser	Arg	Ser	Ser	Glu	Ser	Phe	Gly
			35				40					45			
Lys	Tyr	Thr	Ser	Pro	Val	Met	Ser	Glu	His	Gly	Asp	Glu	His	Arg	Gln
			50			55				60					
Leu	Leu	Ser	His	Pro	Met	Gln	Gly	Pro	Gly	Leu	Arg	Ala	Ala	Thr	Ser
65					70					75				80	
Ser	Asn	His	Ser	Val	Asp	Glu	Gln	Leu	Lys	Asn	Thr	Asp	Thr	His	Leu
				85					90					95	
Ile	Asp	Leu	Val	Thr	Asn	Glu	Ile	Ile	Thr	Gln	Gly	Pro	Pro	Val	Asp
			100					105					110		
Trp	Asn	Asp	Ile	Ala	Gly	Leu	Asp	Leu	Val	Lys	Ala	Val	Ile	Lys	Glu

115	120	125
Glu Val Leu Trp Pro Val Leu Arg Ser Asp Ala Phe Ser Gly Leu Thr		
130	135	140
Ala Leu Pro Arg Ser Ile Leu Leu Phe Gly Pro Arg Gly Thr Gly Lys		
145	150	155
Thr Leu Leu Gly Arg Cys Ile Ala Ser Gln Leu Gly Ala Thr Phe Phe		
165	170	175
Lys Ile Ala Gly Ser Gly Leu Val Ala Lys Gly Leu Gly Glu Ala Glu		
180	185	190
Lys Ile Ile His Ala Ser Phe Leu Val Ala Arg Cys Arg Gln Pro Ser		
195	200	205
Val Ile Phe Val Ser Asp Ile Asp Met Leu Leu Ser Ser Gln Val Asn		
210	215	220
Glu Glu His Ser Pro Val Ser Arg Met Arg Thr Glu Phe Leu Met Gln		
225	230	235
Leu Asp Thr Val Leu Thr Ser Ala Glu Asp Gln Ile Val Val Ile Cys		
245	250	255
Ala Thr Ser Lys Pro Glu Glu Ile Asp Glu Ser Leu Arg Arg Tyr Phe		
260	265	270
Met Lys Arg Leu Leu Ile Pro Leu Pro Asp Ser Thr Ala Arg His Gln		
275	280	285
Ile Ile Val Gln Leu Leu Ser Gln His Asn Tyr Cys Leu Asn Asp Lys		
290	295	300
Glu Phe Ala Leu Leu Val Gln Arg Thr Glu Gly Phe Ser Gly Leu Asp		
305	310	315
Val Ala His Leu Cys Gln Glu Ala Val Val Gly		
325	330	

<210> 881

<211> 313

<212> DNA

<213> Homo sapiens

<400> 881

cgcgtgagcg tgcacaatgc tccaggaacc ggtgtgtatg aggcggggga ttctaccggt
60

cgtggtttgc agggcatgcg tgagcgcgcc cgtatccatg gcggcaccgc gcgctggggc
120

gactcgcagt attatgaagg cggtttcaac gtcacgggtg agattccaac atgagcggcc
180

aaaggatgaa catggacacg acgcgccccca atcacgggtcg gggcttgccg acgatcagcc
240

ggctgggtgc gcaccggttt tgccatggtg ctggattcgc aggacgacat cacggtggcc
300

tggcaagccg acn

313

<210> 882

<211> 57

<212> PRT

<213> Homo sapiens

<400> 882

Arg Val Ser Val Asp Asn Ala Pro Gly Thr Gly Val Tyr Glu Ala Gly

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      1             5             10             15
Asp Ser Thr Gly Arg Gly Leu Gln Gly Met Arg Glu Arg Ala Arg Ile
      20             25             30
His Gly Gly Thr Ala Arg Trp Gly Asp Ser Gln Tyr Tyr Glu Gly Gly
      35             40             45
Phe Asn Val Thr Val Glu Ile Pro Thr
      50             55

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<210> 883
 <211> 576
 <212> DNA
 <213> Homo sapiens

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<400> 883
naattaagat ctgggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
60
tcctcactga ccaaggcaag ccattgcttct gagtgcttga ggccaccgaa atgaacaaat
120
ggaaaacact cccatctttt tcaagcctac ctttttagcag aagaggcaga tacacaagcc
180
ctaaagatgt aacatcaggc tgagtggagg aaggctgaga agaaaaataa agcagggtca
240
ggaggagaga gtgatgtcag gatgcccttg tgcttactcc agcctccttg tgaaaaccca
300
gctctcctgt ctcccagtga agacttggat ggcagccatc aggggaaggct gggccccagc
360
tgaggagtat ggtgtgagct ctatagacca tccctctctg caatcaataa acacttgctt
420
gtgaaagagg cccaagccac catccgcatg gacaccagtg caagtggccc caccgcctg
480
gtcctcagtg actgtgccac cagccatggg agcctgcgca tccaactgct gcataagctc
540
tccttctctg tgaacgcctt agctaagcag gtcattg
576

```

<210> 884
 <211> 105
 <212> PRT
 <213> Homo sapiens

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<400> 884
Met Pro Leu Cys Leu Leu Gln Pro Pro Cys Glu Asn Pro Ala Leu Leu
1             5             10             15
Ser Pro Ser Glu Asp Leu Asp Gly Ser His Gln Gly Arg Leu Gly Pro
      20             25             30
Ser Trp Glu Tyr Gly Cys Glu Leu Tyr Arg Pro Ser Leu Ser Ala Ile
      35             40             45
Asn Lys His Leu Pro Val Lys Glu Ala Gln Ala Thr Ile Arg Met Asp
      50             55             60
Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr
      65             70             75             80
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu
      85             90             95
Val Asn Ala Leu Ala Lys Gln Val Met

```

100

105

<210> 885
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 885
 actagtggcg ccctcatccg ggccgctgtc ccgctctcgg agtcgggtgc gttggagtcc
 60
 ggtgaggcga tgctgacgaa cgacacaccg gtgacttggg atggcgggaa agtacggggc
 120
 aggcgggtgt cgcgcctcgg tgcgatcgag ttgtcgtcga ccccggtccg ccagatccg
 180
 gtacgggctc gccacgtggc gctggaagca gtgaggtctg ggggacttga cgtagcgagc
 240
 ctgacgaaga acggtgaatc tttgcgacgc cgtcttgccc tggcccatcg ggtgtttggt
 300
 gatccctggc ccgatgtcag cgatgaggct ctgctagcct gcgcgagga gtggtttgac
 360
 ctcgacgcgt
 370

<210> 886
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 886
 Thr Ser Gly Ala Leu Ile Arg Ala Ala Val Pro Leu Ser Glu Ser Ala
 1 5 10 15
 Ala Leu Glu Ser Gly Glu Ala Met Leu Thr Asn Asp Thr Pro Val Thr
 20 25 30
 Trp Asp Gly Gly Lys Val Arg Gly Arg Arg Val Ser Arg Leu Gly Ala
 35 40 45
 Ile Glu Leu Ser Ser Thr Pro Val Arg Pro Asp Pro Val Arg Ala Arg
 50 55 60
 His Val Ala Leu Glu Ala Val Arg Ser Gly Gly Leu Asp Val Ala Ser
 65 70 75 80
 Leu Thr Lys Asn Gly Glu Ser Leu Arg Arg Arg Leu Ala Leu Ala His
 85 90 95
 Arg Val Phe Gly Asp Pro Trp Pro Asp Val Ser Asp Glu Ala Leu Leu
 100 105 110
 Ala Cys Ala Glu Glu Trp Leu Asp Leu Asp Ala
 115 120

<210> 887
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 887
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 60

attatctccg gctgcctgaa ccagcttggt aaacgctatc cgcctctgac cggcgaaggc
 120
 caactgatgc caaaccgtgc taatgctgat accacggctt cccaaccggc gttctccggt
 180
 aaagcggacg tgaccacat tgccctccggc gcgttgctgg ccgtgctgct ttacatgggtg
 240
 ggtaggttgg ttcacaagtt gattggcctg cctgctccgg ttggcatgtt gtttgtggcg
 300
 gtgctggtca aactgtgcaa cggcgcttct ccccgctgc tcgaaggctc gcaggtggtt
 360
 tacaaattct tccagacctc cgtcacctat ccgattctgt tcgccgttgg cgtggcgatt
 420
 acgccgtggc aggaactggt caacgcg
 447

<210> 888

<211> 149

<212> PRT

<213> Homo sapiens

<400> 888

Gln	Gly	Val	Ala	Leu	Gly	Arg	Val	Leu	Pro	Met	Val	Met	Leu	Gly	Gly
1				5				10					15		
Leu	Thr	Ala	Ile	Ile	Ile	Ser	Gly	Cys	Leu	Asn	Gln	Leu	Gly	Lys	Arg
			20					25					30		
Tyr	Pro	His	Leu	Thr	Gly	Glu	Gly	Gln	Leu	Met	Pro	Asn	Arg	Ala	Asn
		35					40					45			
Ala	Asp	Thr	Thr	Ala	Ser	Gln	Pro	Ala	Phe	Ser	Gly	Lys	Ala	Asp	Val
	50					55					60				
Thr	Thr	Ile	Ala	Ser	Gly	Ala	Leu	Leu	Ala	Val	Leu	Leu	Tyr	Met	Val
65					70					75					80
Gly	Arg	Leu	Val	His	Lys	Leu	Ile	Gly	Leu	Pro	Ala	Pro	Val	Gly	Met
			85						90					95	
Leu	Phe	Val	Ala	Val	Leu	Val	Lys	Leu	Cys	Asn	Gly	Ala	Ser	Pro	Arg
			100					105					110		
Leu	Leu	Glu	Gly	Ser	Gln	Val	Val	Tyr	Lys	Phe	Phe	Gln	Thr	Ser	Val
			115				120					125			
Thr	Tyr	Pro	Ile	Leu	Phe	Ala	Val	Gly	Val	Ala	Ile	Thr	Pro	Trp	Gln
	130					135					140				
Glu	Leu	Val	Asn	Ala											
145															

<210> 889

<211> 450

<212> DNA

<213> Homo sapiens

<400> 889

ggtaccaccc cacacctgac aagaggtggc cagggaggaa gggaggggtc ttacctcccc
 60
 atctcccctc agtaaaattc aggatgccca gtgaagtttg aatgtcagat aaacaatttg
 120
 ttagtataag gatgtaccta gcattgaaat gatgccttgt aatttactaa atctgcaact
 180

atgcagcctt atttcatggc gggcagtggc ggtgatccca ggtttcaggg gcggggaagg
 240
 gtgctgggga gatcctgagg tcaggaaccc gtacacctct gcttctgccc tctcttccct
 300
 gtgccggcca caaggcaatg actcctgtgt ggggtgcagag gcagaaatgg gtctggaagg
 360
 ggattcccag tgtctggcaa gttctggtaa attctgcatt ggaggttctc tctgtagtaa
 420
 ggggagttgg cctggccgcc cttcacgcgt
 450

<210> 890

<211> 100

<212> PRT

<213> Homo sapiens

<400> 890

Met	Met	Pro	Cys	Asn	Leu	Leu	Asn	Leu	Gln	Leu	Cys	Ser	Leu	Ile	Ser
1				5					10					15	
Trp	Arg	Ala	Val	Ala	Val	Ile	Pro	Gly	Phe	Arg	Gly	Gly	Glu	Gly	Cys
			20					25					30		
Trp	Gly	Asp	Pro	Glu	Val	Arg	Asn	Pro	Tyr	Thr	Ser	Ala	Ser	Ala	Leu
		35					40					45			
Ser	Ser	Leu	Cys	Arg	Pro	Gln	Gly	Asn	Asp	Ser	Cys	Val	Gly	Ala	Glu
		50				55					60				
Ala	Glu	Met	Gly	Leu	Glu	Gly	Asp	Ser	Gln	Cys	Leu	Ala	Ser	Ser	Gly
65				70					75					80	
Lys	Phe	Cys	Ile	Gly	Gly	Ser	Leu	Cys	Ser	Lys	Gly	Ser	Trp	Pro	Gly
			85					90						95	
Arg	Pro	Ser	Arg												
			100												

<210> 891

<211> 318

<212> DNA

<213> Homo sapiens

<400> 891

nncaccgtcc ccgtactgga tccgcgcgag gatttcgccg actgcatgca cattgacgta
 60
 ctggatccct tccacactga caacaccagt gagcacagtg acctggccac agatggccag
 120
 actaacggcc cggctgatag cgggactggc acccactctg agcagggaaa ctccgacata
 180
 tctagccccg tcagctctag tgacgtgctt aacaccaccg acagcactgc tggcaatacc
 240
 ggtgaaggta ctgccgcgaa tatgcctggg gacatggctc attcttcgac ggctaccac
 300
 ccctatgcaa gcaccggt
 318

<210> 892

<211> 106

<212> PRT

<213> Homo sapiens

<400> 892

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Xaa Thr Val Pro Val Leu Asp Pro Arg Glu Asp Phe Ala Asp Cys Met
 1           5           10          15
His Ile Asp Val Leu Asp Pro Phe His Thr Asp Asn Thr Ser Glu His
      20           25           30
Ser Asp Leu Ala Thr Asp Gly Gln Thr Asn Gly Pro Ala Asp Ser Gly
      35           40           45
Thr Gly Thr His Ser Glu Gln Gly Asn Ser Asp Ile Ser Ser Pro Val
      50           55           60
Ser Ser Ser Asp Ala Ala Asn Thr Thr Asp Ser Thr Ala Gly Asn Thr
65           70           75           80
Gly Glu Gly Thr Ala Ala Asn Met Pro Gly Asp Met Ala His Ser Ser
      85           90           95
Thr Ala Thr His Pro Tyr Ala Ser Thr Gly
      100          105

```

<210> 893

<211> 510

<212> DNA

<213> Homo sapiens

<400> 893

```

nnggataccta tccctgaatc taagggttggg gacacatgtg tttgggatag caaggtagag
60
aagtcacaga aaaagcctgt ggaaaacagg atgaaggagg aaaaagcag catcagggaa
120
gcaatcagca aagccaagag tacagcaa ataaagacag aacaggaagg tgaggcatct
180
gagaagagct tgcattctgag cccacagcat atcacacacc agactatgcc tataggacag
240
agaggcagtg agcaaggcaa acgtgtggag aacattaatg gaacctccta ccctagtcta
300
cagcagaaaa ccaatgctgt taagaaatta cataaatgtg atgaatgtgg gaaatccttc
360
aaatataatt cccgccttgt tcaacataaa attatgcaca ctggggaaaa gcgctatgaa
420
tgtgatgact gtggaggggac ttccgggagc agctcgagcc ttcgggtcca caaacggatc
480
cacactgggt acggagagaa gacaacgcgt
510

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<210> 894

<211> 170

<212> PRT

<213> Homo sapiens

<400> 894

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Xaa Asp Pro Ile Pro Glu Ser Lys Val Gly Asp Thr Cys Val Trp Asp
 1           5           10          15
Ser Lys Val Glu Lys Ser Gln Lys Lys Pro Val Glu Asn Arg Met Lys
      20           25           30
Glu Asp Lys Ser Ser Ile Arg Glu Ala Ile Ser Lys Ala Lys Ser Thr

```

35					40					45					
Ala	Asn	Ile	Lys	Thr	Glu	Gln	Glu	Gly	Glu	Ala	Ser	Glu	Lys	Ser	Leu
50					55					60					
His	Leu	Ser	Pro	Gln	His	Ile	Thr	His	Gln	Thr	Met	Pro	Ile	Gly	Gln
65					70					75					80
Arg	Gly	Ser	Glu	Gln	Gly	Lys	Arg	Val	Glu	Asn	Ile	Asn	Gly	Thr	Ser
85					90					95					
Tyr	Pro	Ser	Leu	Gln	Gln	Lys	Thr	Asn	Ala	Val	Lys	Lys	Leu	His	Lys
100					105					110					
Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Arg	Leu	Val	Gln
115					120					125					
His	Lys	Ile	Met	His	Thr	Gly	Glu	Lys	Arg	Tyr	Glu	Cys	Asp	Asp	Cys
130					135					140					
Gly	Gly	Thr	Phe	Arg	Ser	Ser	Ser	Ser	Leu	Arg	Val	His	Lys	Arg	Ile
145					150					155					160
His	Thr	Gly	Tyr	Gly	Glu	Lys	Thr	Thr	Arg						
165					170										

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<210> 895
<211> 1119
<212> DNA
<213> Homo sapiens
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<400> 895
cgcccgagga attgggtcgg gcatttcag atgttccgt ggttgattcg tccggcaatc
60
acgttcggga gaggtcgat tcaactcccc gattaatcgt tgccacccca agggccgaac
120
ccgcaccgga atcgggcttt tcctggggct gccttcctaa atgcggtgtc ctccctgtcg
180
aggcctggcc tggcggcggg ggagcagacc gtcgatcggg ggatggcaat cctggccttg
240
gtccgatcag tgcgggatgg gggccgggca gttatcgctg ggcccttcgga ggacgcgcgc
300
ttgcaggcca tggttcgaaa tgatccagtc gggtagggca cacgtgaact cgcgatcgt
360
cgggaggcac atttcccgcc cgcggtgccg tgcggaattg tcgacggtga cccgaaagcg
420
gtggctacag cggcacagcg actacgcgag tggttcggaa ccgacctga gatgcttggc
480
ccagctccac aaccacgccg tgccagcgaa tcggaacggg atcgaattat cgtgcgtcct
540
cgtagcacga tgctctctgc cgagctttcc cagggtctat ttcggctacg ttccaaacac
600
actatgagcc gcgaaccagg aagcttacgc gtggtcatcg acccggccaa cttgttgtga
660
ggtcggtagg cttgcggtgt gagacttctt tttgctggta ccccggaagt ggccgtccca
720
acgcttaccg ccttggtagc cgatccccgt cagcaggtag ctgccgtcct gacgcgtccg
780
gatgcagcag taggacggca ccgtactcca cgtccatgcc cggtcgcca ggctgccgag
840
gaactcggta tccccgccat taaggcgacc agcgtgaagt ccggcgaggg tcacgatgcc
900

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gtcacttccc tcgatgtcga cgtagccgtc gtcgtagcct acggaggtct cattcccgcc
 960
 gatctgctgg cagtaccacg acacggctgg attaaacttac acttttctct cctaccgcga
 1020
 tggcgcgggc ctgctcccat acaacggggc atcatggcgg gggatgagga gacggggcgt
 1080
 tgtgtctttc agctagttga aagcctcgat gccggaccg
 1119

<210> 896

<211> 147

<212> PRT

<213> Homo sapiens

<400> 896

Val	Arg	Leu	Leu	Phe	Ala	Gly	Thr	Pro	Asp	Val	Ala	Val	Pro	Thr	Leu
1				5					10					15	
Thr	Ala	Leu	Val	Ala	Asp	Pro	Arg	His	Glu	Val	Ala	Ala	Val	Leu	Thr
			20					25					30		
Arg	Pro	Asp	Ala	Ala	Val	Gly	Arg	His	Arg	Thr	Pro	Arg	Pro	Cys	Pro
		35					40					45			
Val	Ala	Lys	Ala	Ala	Glu	Glu	Leu	Gly	Ile	Pro	Ala	Ile	Lys	Ala	Thr
	50					55				60					
Ser	Val	Lys	Ser	Gly	Glu	Gly	His	Asp	Ala	Val	Thr	Ser	Leu	Asp	Val
65					70				75					80	
Asp	Val	Ala	Val	Val	Val	Ala	Tyr	Gly	Gly	Leu	Ile	Pro	Ala	Asp	Leu
			85						90					95	
Leu	Ala	Val	Pro	Arg	His	Gly	Trp	Ile	Asn	Leu	His	Phe	Ser	Leu	Leu
		100						105					110		
Pro	Arg	Trp	Arg	Gly	Ala	Ala	Pro	Ile	Gln	Arg	Ala	Ile	Met	Ala	Gly
		115				120						125			
Asp	Glu	Glu	Thr	Gly	Ala	Cys	Val	Phe	Gln	Leu	Val	Glu	Ser	Leu	Asp
	130					135					140				
Ala	Gly	Pro													
145															

<210> 897

<211> 384

<212> DNA

<213> Homo sapiens

<400> 897

gagctcgagg ctggcaagcc ggaagtgccg ctgttcccga cgcccgcagg catgtcgcgc
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 gacgactacc tcgtccagct gtcgaaggaa gggctcgaga cccgtctcgc gcagctgtat
 120
 ccggtcgaag cccgacgcga cgcgccagcgc gacacctact acaagcgcct cgaattcgag
 180
 tgcgggacca tcacgaagat gggctttccc ggctacttcc tgatcgtcgc ggacttcac
 240
 aactgggcaa agaacaacgg cgtgccgggc ggcccggggc gcggctcggg cgccgggttcg
 300
 ctggtcgcgt atgcgctcgg cattaccgat ctogaagtac tgcgctacga cctgctgttc
 360

gagcgccttcc tgaacccgga acgc
384

<210> 898
<211> 128
<212> PRT
<213> Homo sapiens

<400> 898
Glu Leu Glu Ala Gly Lys Pro Glu Val Pro Leu Phe Pro Thr Pro Asp
1 5 10 15
Gly Met Ser Leu Asp Asp Tyr Leu Val Gln Leu Ser Lys Glu Gly Leu
20 25 30
Glu Thr Arg Leu Ala Gln Leu Tyr Pro Val Glu Ala Arg Arg Asp Ala
35 40 45
Gln Arg Asp Thr Tyr Tyr Lys Arg Leu Glu Phe Glu Cys Gly Thr Ile
50 55 60
Thr Lys Met Gly Phe Pro Gly Tyr Phe Leu Ile Val Ala Asp Phe Ile
65 70 75 80
Asn Trp Ala Lys Asn Asn Gly Val Pro Val Gly Pro Gly Arg Gly Ser
85 90 95
Gly Ala Gly Ser Leu Val Ala Tyr Ala Leu Gly Ile Thr Asp Leu Glu
100 105 110
Val Leu Arg Tyr Asp Leu Leu Phe Glu Arg Phe Leu Asn Pro Glu Arg
115 120 125

<210> 899
<211> 6171
<212> DNA
<213> Homo sapiens

<400> 899
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60
ccatccgcct gcactggaga ggagagtttg agtatgctgc agctgcttta tctgaccaac
120
aatctcctga cggatcagtg catacctgtc ctggtagggc acctgcacct gcgaatcttg
180
caccttgcaa acaatcagtt acagaccttt cctgcaagca aactaaataa attggagcaa
240
ttggaggaac tgaacctaag tggcaacaag cttaaaacca ttcccacaac catagcaaac
300
tgtaaaaggc tgcacaccct tggtgcacac tccaacaaca tcagcatttt ccagaaata
360
ctgcagttgc ctcatgcca gttttagtag ctaagttgca acgacttgac agaaatcctg
420
attccagagg ctttgctgc tacattacaa gaccttgacc tgactggaaa tacaatctg
480
gttctggaac acaagacact ggacatattt agccatatca caaccctgaa aattgatcag
540
aaacctttgc caaccacaga ttctacagtt acgtcaacct tctggagcca tggactggct
600
gagatggcag ggcagagaaa taagctgtgt gtctcagcac ttgctatgga tagctttgca
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<210> 900

<211> 734

<212> PRT

<213> Homo sapiens

<400> 900

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Leu	Glu	Ser	Leu	Pro	Ser	Ala	Cys	Thr	Gly	Glu	Glu	Ser	Leu	Ser	Met
			20					25					30		
Leu	Gln	Leu	Leu	Tyr	Leu	Thr	Asn	Asn	Leu	Leu	Thr	Asp	Gln	Cys	Ile
			35				40					45			
Pro	Val	Leu	Val	Gly	His	Leu	His	Leu	Arg	Ile	Leu	His	Leu	Ala	Asn
			50				55				60				
Asn	Gln	Leu	Gln	Thr	Phe	Pro	Ala	Ser	Lys	Leu	Asn	Lys	Leu	Glu	Gln
65					70					75				80	
Leu	Glu	Glu	Leu	Asn	Leu	Ser	Gly	Asn	Lys	Leu	Lys	Thr	Ile	Pro	Thr
			85					90					95		
Thr	Ile	Ala	Asn	Cys	Lys	Arg	Leu	His	Thr	Leu	Val	Ala	His	Ser	Asn
			100					105					110		
Asn	Ile	Ser	Ile	Phe	Pro	Glu	Ile	Leu	Gln	Leu	Pro	Gln	Ile	Gln	Phe
			115				120					125			
Val	Asp	Leu	Ser	Cys	Asn	Asp	Leu	Thr	Glu	Ile	Leu	Ile	Pro	Glu	Ala
			130				135				140				
Leu	Pro	Ala	Thr	Leu	Gln	Asp	Leu	Asp	Leu	Thr	Gly	Asn	Thr	Asn	Leu
145					150					155				160	
Val	Leu	Glu	His	Lys	Thr	Leu	Asp	Ile	Phe	Ser	His	Ile	Thr	Thr	Leu
			165						170				175		
Lys	Ile	Asp	Gln	Lys	Pro	Leu	Pro	Thr	Thr	Asp	Ser	Thr	Val	Thr	Ser
			180					185					190		
Thr	Phe	Trp	Ser	His	Gly	Leu	Ala	Glu	Met	Ala	Gly	Gln	Arg	Asn	Lys

195	200	205
Leu Cys Val Ser Ala	Leu Ala Met Asp Ser Phe	Ala Glu Gly Val Gly
210	215	220
Ala Val Tyr Gly Met	Phe Asp Gly Asp Arg Asn	Glu Glu Leu Pro Arg
225	230	235
Leu Leu Gln Cys Thr	Met Ala Asp Val Leu Leu	Glu Glu Val Gln Gln
245	250	255
Ser Thr Asn Asp Thr	Val Phe Met Ala Asn Thr	Phe Leu Val Ser His
260	265	270
Arg Lys Leu Gly Met	Ala Gly Gln Lys Leu Gly	Ser Ser Ala Leu Leu
275	280	285
Cys Tyr Ile Arg Pro	Asp Thr Ala Asp Pro Ala	Ser Ser Phe Ser Leu
290	295	300
Thr Val Ala Asn Val	Gly Thr Cys Gln Ala Val	Leu Cys Arg Gly Gly
305	310	315
Lys Pro Val Pro Leu	Ser Lys Val Phe Ser Leu	Glu Gln Asp Pro Glu
325	330	335
Glu Ala Gln Arg Val	Lys Asp Gln Lys Ala Ile	Ile Thr Glu Asp Asn
340	345	350
Lys Val Asn Gly Val	Thr Cys Cys Thr Arg Met	Leu Gly Cys Thr Tyr
355	360	365
Leu Tyr Pro Trp Ile	Leu Pro Lys Pro His Ile	Ser Ser Thr Pro Leu
370	375	380
Thr Ile Gln Asp Glu	Leu Leu Ile Leu Gly Asn	Lys Ala Leu Trp Glu
385	390	395
His Leu Ser Tyr Thr	Glu Ala Val Asn Ala Val	Arg His Val Gln Asp
405	410	415
Pro Leu Ala Ala Ala	Lys Lys Leu Cys Thr Leu	Ala Gln Ser Tyr Gly
420	425	430
Cys Gln Asp Ser Val	Gly Ala Met Val Val Tyr	Leu Asn Ile Gly Glu
435	440	445
Glu Gly Cys Thr Cys	Glu Met Asn Gly Leu Thr	Leu Pro Gly Pro Val
450	455	460
Gly Phe Ala Ser Thr	Thr Thr Ile Lys Asp Ala	Pro Lys Pro Ala Thr
465	470	475
Pro Ser Ser Ser Ser	Gly Ile Ala Ser Glu Phe	Ser Ser Glu Met Ser
485	490	495
Thr Ser Glu Val Ser	Ser Glu Val Gly Ser Thr	Ala Ser Asp Glu His
500	505	510
Asn Ala Gly Gly Leu	Asp Thr Ala Leu Leu Pro	Arg Pro Glu Arg Arg
515	520	525
Cys Ser Leu His Pro	Thr Pro Thr Ser Gly Leu	Phe Gln Arg Gln Pro
530	535	540
Ser Ser Ala Thr Phe	Ser Ser Asn Gln Ser Asp	Asn Gly Leu Asp Ser
545	550	555
Asp Asp Asp Gln Pro	Val Glu Gly Val Ile Thr	Asn Gly Ser Lys Val
565	570	575
Glu Val Glu Val Asp	Ile His Cys Cys Arg Gly	Arg Asp Leu Glu Asn
580	585	590
Ser Pro Pro Leu Ile	Glu Ser Ser Pro Thr Leu	Cys Ser Glu Glu His
595	600	605
Ala Arg Gly Ser Cys	Phe Gly Ile Arg Arg Gln	Asn Ser Val Asn Ser
610	615	620
Gly Met Leu Leu Pro	Met Ser Lys Asp Arg Met	Glu Leu Gln Lys Ser

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625          630          635          640
Pro Ser Thr Ser Cys Leu Tyr Gly Lys Lys Leu Ser Asn Gly Ser Ile
          645          650          655
Val Pro Leu Glu Asp Ser Leu Asn Leu Ile Glu Val Ala Thr Glu Val
          660          665          670
Pro Lys Arg Lys Thr Gly Tyr Phe Ala Ala Pro Thr Gln Met Glu Pro
          675          680          685
Glu Asp Gln Phe Val Val Pro His Asp Leu Glu Glu Glu Val Lys Glu
          690          695          700
Gln Met Lys Gln His Gln Asp Ser Arg Leu Glu Pro Glu Pro His Glu
705          710          715          720
Glu Asp Arg Thr Glu Pro Pro Glu Glu Phe Asp Thr Ala Leu
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<210> 901
 <211> 309
 <212> DNA
 <213> Homo sapiens

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<400> 901
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180
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cactcatga
309

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<210> 902
 <211> 102
 <212> PRT
 <213> Homo sapiens

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<400> 902
Met Ile His Leu Pro Arg Pro Pro Lys Val Leu Gly Leu His Thr Asp
1      5      10      15
Gly Lys Leu His Phe Leu Phe Leu Leu Met Gln Gln Gly His Pro Lys
20     25     30
Ile Arg Leu Pro Ser Val Ser Val Val Ser Ser Asp Gly His Leu Trp
35     40     45
Ser Phe Gln Arg Leu Met His Trp Val Thr Arg His Cys Lys Arg Pro
50     55     60
Gln Ile Ala Gln His His Leu Thr Phe Thr Pro His His Ile Asn Ile
65     70     75     80
Asp Ala Arg Arg Ser Lys Ala Asp Ala Thr Phe Arg Ala Ala Ser Ile
85     90     95
Gln Lys Thr Pro Leu Met
100

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<210> 903
 <211> 349
 <212> DNA
 <213> Homo sapiens

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 aagggtgtgaa gtctaataagg aaaccttttc tccataaggc tacaatgggt ctaccaaaaa
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<210> 904
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 904
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 Arg Asn Arg Arg Gln Arg Leu Gly Pro Thr Gln Gly Val Lys Ser Asn
 20 25 30
 Arg Lys Pro Phe Leu His Lys Ala Thr Met Gly Leu Pro Lys Ile Lys
 35 40 45
 Pro Cys His Pro Arg Asp Cys Ser Pro Ile Leu Tyr His His Glu Val
 50 55 60
 Gln Lys Ile Pro Ser Cys Glu Phe Ser Phe Lys Trp Pro Trp Ser Pro
 65 70 75 80
 Val Ser Leu Ala Met Trp Gln Lys Gln Thr Ile Leu Phe Gly Gly Tyr
 85 90 95
 Ile Phe Ile Leu Arg Leu
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<210> 905
 <211> 377
 <212> DNA
 <213> Homo sapiens

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<210> 906
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 906
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 Pro Asp Gln Arg Leu Asn Glu Asp Ile Ile Ala Gly Asp Arg Ala
 20 25 30
 Asp Ala Val Ile Ser Val Ser Gln Gly Leu Cys Asp Arg Leu Ala Gly
 35 40 45
 His Gly Val Thr Ser Thr Val Val Pro Asn Ile Val Asp Val Glu Leu
 50 55 60
 Phe Asp Arg Pro Asp Arg Arg His Glu Gly Thr Ile Val Val Ser Val
 65 70 75 80
 Ala Thr Leu Asn Pro Gly Lys Gly Met Ile Glu Leu Ala Gln Ala Val
 85 90 95
 Glu Arg Leu Pro Glu Val Gln Leu Arg Ile Ile Gly Asp Gly Pro Gln
 100 105 110
 Arg His Gln Leu Glu Ala Ile Ala Ala Asp Asn Pro Arg
 115 120 125

<210> 907
 <211> 332
 <212> DNA
 <213> Homo sapiens

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<210> 908
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 908

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          20           25           30
Val Pro Gln Gly Thr Phe Ala Glu Arg Ile Arg Ala Gly Ala Ala Gly
          35           40           45
Ile Ala Ala Phe Phe Thr Pro Thr Gly Tyr Gly Thr Ala Val Gln Lys
          50           55           60
Gly Glu Leu Val Leu Lys Tyr Glu Lys Lys Asp Gly Lys Ala Val Pro
65           70           75           80
Val Met Thr Ser Lys Pro Arg Glu Val Arg Ser Phe Asp Gly Arg Asp
          85           90           95
Tyr Ile Ile Glu Glu Val Ile Lys Asp Glu
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<210> 909

<211> 318

<212> DNA

<213> Homo sapiens

<400> 909

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<210> 910

<211> 102

<212> PRT

<213> Homo sapiens

<400> 910

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Met Pro Gln Gly His Arg Arg Cys Arg His Gln Lys Ser Arg Leu Ala
          20           25           30
Pro Ala Ala Pro Pro Arg Asp Gly Asp Ser Arg Gly Ser Thr Arg Ala
          35           40           45
Arg Glu Ser Arg Gly Cys Val Thr Pro Leu Phe Phe Pro Pro Gln His
          50           55           60
Arg Thr Gly Gly Pro Trp Leu Arg Ile Arg Thr Pro Phe Ala Pro Ala
65           70           75           80
Cys Ala Cys Ser Ser Ala Pro Gly Ala Arg Met Arg Met Tyr Arg Arg
          85           90           95
His Lys Ala Arg Arg Arg

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100

<210> 911
 <211> 506
 <212> DNA
 <213> Homo sapiens

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<210> 912
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 912
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 His Leu His His Ser Met Leu Ser Pro Gln Thr Asp Gln Thr Met Asn
 20 25 30
 Pro Gly Trp Trp Lys Ala Asp Leu Arg Thr Leu Asp Phe Phe Phe Phe
 35 40 45
 Leu Ala Leu His His Leu Gln Gly Ser Glu Met Ala Gly Leu Gly Gly
 50 55 60
 Gly Gln Gly Val Pro Gln Gly Leu Leu Gln Arg Pro Gly Cys Ser Val
 65 70 75 80
 Val Pro Gly Pro Ser Arg Leu Arg Phe His Pro Leu Ala His Ser Ser
 85 90 95
 His Gly Arg Thr Pro Ala Pro Val Pro Thr Pro Glu Val Ser Arg Pro
 100 105 110
 Ala Thr Lys Pro Asp Met His Phe Thr Pro Thr Ser His Ala Ala Ser
 115 120 125
 Arg

<210> 913
 <211> 339

<212> DNA

<213> Homo sapiens

<400> 913

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120
ctggggcgcca cggacctgct ttctgccttc gactcgattc cggcgctcta tggtttcacc
180
aacgaggggt accttatact taccgctaac gtctttgctc tcatgggctt gcgtcagttg
240
tatttcctta ttggaagcct gttggaacgt ctggtgtact tgctgctggg actgggtcgtg
300
atattgggct ttatcgccct caagctcatt ggccacgcg
339
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<210> 914

<211> 113

<212> PRT

<213> Homo sapiens

<400> 914

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Arg Phe Met Ala Trp Phe Arg Arg Thr Val Pro Ala Thr Gly Asp Tyr
 1             5             10             15
Arg Gly Thr Lys Phe Phe Val Arg Glu Asn Gly Lys Thr Leu Ala Thr
      20             25             30
Ser Met Phe Met Val Cys Val Ala Leu Gly Ala Thr Asp Leu Leu Phe
      35             40             45
Ala Leu Asp Ser Ile Pro Ala Ser Tyr Gly Phe Thr Asn Glu Gly Tyr
      50             55             60
Leu Ile Leu Thr Ala Asn Val Phe Ala Leu Met Gly Leu Arg Gln Leu
      65             70             75             80
Tyr Phe Leu Ile Gly Ser Leu Leu Glu Arg Leu Val Tyr Leu Ser Leu
      85             90             95
Gly Leu Val Val Ile Leu Gly Phe Ile Ala Leu Lys Leu Ile Gly His
      100             105             110
Ala
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<210> 915

<211> 663

<212> DNA

<213> Homo sapiens

<400> 915

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120
ttaaccaagg gagagacttg catgaatcct caggatttta agccaggagc aatgggtctg
180
gagcagaatg gaaaatcggg acacactttg actggtgatg gtctcaatgg accatcagat
240
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gcaagtgagc agagagtatc catggcatcg tcaggcagct cccagcctga actagtgact
 300
 atccctttga ttaagggccc taaaggggtt gggtttgcaa ttgctgacag ccctactgga
 360
 cagaaggtga aaatgatact ggatagtcag tgggtgtcaag gccttcagaa aggagatata
 420
 attaaggaaa tataccatca aaatgtgcag aatttaacac atctccaagt ggtagaggtg
 480
 ctaaagcagt ttccagtagg tgctgatgta ccattgctta tcttaagagg aggtccccct
 540
 tcaccaacca aaagtgccaa aatgaaaaca gataaaaagg aaaatgcagg aagtttggag
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 gccataaatg agcctattcc tcagcctatg ccttttccac cgagcattat caggtcagga
 660
 tcc
 663

<210> 916
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 916
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 Pro Leu Pro Asp Asp Ser Glu Asp Pro Val Val Asp Ile Val Ala Ala
 20 25 30
 Thr Pro Val Ile Asn Gly Gln Ser Leu Thr Lys Gly Glu Thr Cys Met
 35 40 45
 Asn Pro Gln Asp Phe Lys Pro Gly Ala Met Val Leu Glu Gln Asn Gly
 50 55 60
 Lys Ser Gly His Thr Leu Thr Gly Asp Gly Leu Asn Gly Pro Ser Asp
 65 70 75 80
 Ala Ser Glu Gln Arg Val Ser Met Ala Ser Ser Gly Ser Ser Gln Pro
 85 90 95
 Glu Leu Val Thr Ile Pro Leu Ile Lys Gly Pro Lys Gly Phe Gly Phe
 100 105 110
 Ala Ile Ala Asp Ser Pro Thr Gly Gln Lys Val Lys Met Ile Leu Asp
 115 120 125
 Ser Gln Trp Cys Gln Gly Leu Gln Lys Gly Asp Ile Ile Lys Glu Ile
 130 135 140
 Tyr His Gln Asn Val Gln Asn Leu Thr His Leu Gln Val Val Glu Val
 145 150 155 160
 Leu Lys Gln Phe Pro Val Gly Ala Asp Val Pro Leu Leu Ile Leu Arg
 165 170 175
 Gly Gly Pro Pro Ser Pro Thr Lys Ser Ala Lys Met Lys Thr Asp Lys
 180 185 190
 Lys Glu Asn Ala Gly Ser Leu Glu Ala Ile Asn Glu Pro Ile Pro Gln
 195 200 205
 Pro Met Pro Phe Pro Pro Ser Ile Ile Arg Ser Gly Ser
 210 215 220

<210> 917
 <211> 615

<212> DNA

<213> Homo sapiens

<400> 917

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caggagggcg acctgggtgga ggtggtgctg tcggcctcgg ccaccttcga ggacttccag
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atccgcccgc acgcccctcac ggtgcactcc tatcggggcg ctgccttctg tgatcactgc
240
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300
taccacaagc gctgtgcctt cagcatcccc aacaactgta gtggggcccg caaacggcgc
360
ctgtcatcca cgtctctggc cagtggccac tcggtgcgcc tcggcacctc cgagtccctg
420
ccctgcacgg ctgaagagga gccgtagcac caccgaactc ctgcctcgcc gtccccgtca
480
tcctcttctt cctcttctgc ctcatcgtat acggggccgcc ccattgagct ggacaagatg
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ctgctctcca aggtcaaggt gccgcacacc ttcctcatcc acagctatac acggcccacc
600
gtttgccagg cttagc
615

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<210> 918

<211> 148

<212> PRT

<213> Homo sapiens

<400> 918

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Ile Val Asp Gln Lys Phe Pro Glu Cys Gly Phe Tyr Gly Leu Tyr Asp
 1             5             10             15
Lys Ile Leu Leu Phe Lys His Asp Pro Thr Ser Ala Asn Leu Leu Gln
             20             25             30
Leu Val Arg Ser Ser Gly Asp Ile Gln Glu Gly Asp Leu Val Glu Val
             35             40             45
Val Leu Ser Ala Ser Ala Thr Phe Glu Asp Phe Gln Ile Arg Pro His
             50             55             60
Ala Leu Thr Val His Ser Tyr Arg Ala Pro Ala Phe Cys Asp His Cys
65             70             75             80
Gly Glu Met Leu Phe Gly Leu Val Arg Gln Gly Leu Lys Cys Asp Gly
             85             90             95
Cys Gly Leu Asn Tyr His Lys Arg Cys Ala Phe Ser Ile Pro Asn Asn
             100            105            110
Cys Ser Gly Ala Arg Lys Arg Arg Leu Ser Ser Thr Ser Leu Ala Ser
             115            120            125
Gly His Ser Val Arg Leu Gly Thr Ser Glu Ser Leu Pro Cys Thr Ala
             130            135            140
Glu Glu Glu Pro
145

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<210> 919
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 919
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 acaaatgcga tcttgctcga tagcgacgcg ggtgagtacc tcgccaagat gggcccgccg
 120
 gaagaagact tcatttcgaa cgcgacccat cgtggcgatc acctgaccgc acagcgcgcc
 180
 accttcgcca acccgacctt gctcaacgag atggccgtag tcgatgggtga agtgaagaaa
 240
 ggctcgcttg cccgcgtgga accggaaggc catgtgatgc gcatgtggga agcc
 294

<210> 920
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 920
 Thr Gly Met Arg Pro Leu Ala Val Leu Gly Asp Asn Ile Thr Thr Asp
 1 5 10 15
 His Leu Ser Pro Thr Asn Ala Ile Leu Leu Asp Ser Ala Ala Gly Glu
 20 25 30
 Tyr Leu Ala Lys Met Gly Pro Pro Glu Glu Asp Phe Ile Ser Asn Ala
 35 40 45
 Thr His Arg Gly Asp His Leu Thr Ala Gln Arg Ala Thr Phe Ala Asn
 50 55 60
 Pro Thr Leu Leu Asn Glu Met Ala Val Val Asp Gly Glu Val Lys Lys
 65 70 75 80
 Gly Ser Leu Ala Arg Val Glu Pro Glu Gly His Val Met Arg Met Trp
 85 90 95
 Glu Ala

<210> 921
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 921
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 aaccaggacg tgctgttggt catcgacaac atcttcgggt tctcccaggc tggttctgag
 120
 gtttcaaccc tgctaggtcg tatgcctcg gcggtgggct accagcccaa cttggccgac
 180
 gagatggggc aattgcagga ggaatcacc tcgaccgctg gtcactccat cacctcgatg
 240
 caggccgtct acgtccccgc tgacgattac accgaccggt ctccggcgac gaccttcgcc
 300

cacctggatg ccaccacgga gctttctcgt gagattgcct ctcgtaggcct gtacccggcc
 360
 gtggatccgc tggcgtag
 378

<210> 922
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 922
 Thr Arg Leu Arg Ile Ala Leu Thr Gly Leu Thr Met Ala Glu Tyr Phe
 1 5 10 15
 Arg Asp Val Gln Asn Gln Asp Val Leu Leu Phe Ile Asp Asn Ile Phe
 20 25 30
 Arg Phe Ser Gln Ala Gly Ser Glu Val Ser Thr Leu Leu Gly Arg Met
 35 40 45
 Pro Ser Ala Val Gly Tyr Gln Pro Asn Leu Ala Asp Glu Met Gly Gln
 50 55 60
 Leu Gln Glu Arg Ile Thr Ser Thr Arg Gly His Ser Ile Thr Ser Met
 65 70 75 80
 Gln Ala Val Tyr Val Pro Ala Asp Asp Tyr Thr Asp Pro Ala Pro Ala
 85 90 95
 Thr Thr Phe Ala His Leu Asp Ala Thr Thr Glu Leu Ser Arg Glu Ile
 100 105 110
 Ala Ser Arg Gly Leu Tyr Pro Ala Val Asp Pro Leu Ala Ser
 115 120 125

<210> 923
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 923
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 120
 caacgcaaga atgtcgaaga agaagacatc ttccgcgccc accttgcgct attggaagac
 180
 cccacgctgc tggacgcgc cactggtgcc atcgaacacg gcagcgccgc caccacgcc
 240
 tggcgcgatg caatccaggc gcaatgcgcc gtgttgctgg ccctgggcaa accgctgttt
 300
 gccgagcgcg ccaacgacct gcgcatctg caacagcgag tactgcgtgc gctgttgggg
 360
 gaagcctggc acttcgaatt gccggccggg ccgattttca ggnnggcat taacttacc
 420
 ccttcgcct tgttgcaact gaggcccaa aacgccgtgg gtatttgcac ggccgaaggc
 480
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 540
 ctggggcgccg aagtgctcga cgtgccccaa g
 571

<210> 924
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 924
 Thr Gly Ile Glu Leu Pro Gln Asp Thr Gly Lys His Val Ala Asp Glu
 1 5 10 15
 Gln Leu Gln Arg Leu Asp Thr Ala Leu Glu His Val Arg Gly Glu Ile
 20 25 30
 Arg Ile Thr Leu Glu His Ala Arg Gln Arg Lys Asn Val Glu Glu Glu
 35 40 45
 Asp Ile Phe Ala Ala His Leu Ala Leu Leu Glu Asp Pro Thr Leu Leu
 50 55 60
 Asp Ala Ala Thr Gly Ala Ile Glu His Gly Ser Ala Ala Thr His Ala
 65 70 75 80
 Trp Arg Asp Ala Ile Gln Ala Gln Cys Ala Val Leu Leu Ala Leu Gly
 85 90 95
 Lys Pro Leu Phe Ala Glu Arg Ala Asn Asp Leu Arg Asp Leu Gln Gln
 100 105 110
 Arg Val Leu Arg Ala Leu Leu Gly Glu Ala Trp His Phe Glu Leu Pro
 115 120 125
 Ala Gly Pro Ile Phe Arg Xaa Ala Ile Asn Leu Pro Pro Ser Ala Leu
 130 135 140
 Leu Gln Leu Ser Ala Gln Asn Ala Val Gly Ile Cys Met Ala Glu Gly
 145 150 155 160
 Gly Ala Thr Ser His Val Ala Ile Leu Ala Arg Gly Lys Gly Leu Pro
 165 170 175
 Cys Val Val Ala Leu Gly Ala Glu Val Leu Asp Val Pro Gln
 180 185 190

<210> 925
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 925
 acgcgtgcac tgtgtgtatg catggtaacg tacacgtgtg cactgtgtgt ggtgtgcatg
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 gtggtgtgta tgcattggtgt gtgcacgtgt gcactgtgtg tgtgtgtatg catgtgtgtg
 180
 cacgtgtgcc tgtgtgtatg catggtaatg tgcgtgtgca ctgtgtggtg tgtatgcatg
 240
 tgtgtgcacg tgtgcactgt gtatgcatag tgtgtgcacg tgtgcactgt gtgtggatgc
 300
 atggtaatgt gcacgtgtgc actgtgtgtg gtgtgtatga tgggtgtgtgc acgtgtgcac
 360
 ggtgtgtggt gtgtatgcat gtgtgtgcac gtgtgcactg tgtggcaggg gtgtttggtg
 420
 tgtgtgcatg tatgcatggt gtgtgcatac gtgtgcagca gcacctggtc ccattctccag
 480

tgcccagcag catcacacgc actttggtgc tttataaatg catgggtcagt gaggtgcca
 540
 gcaccaagct gtccctttac cataacacct ggaatagtca cctgtgataa gctatcacat
 600
 aggaaacatt tttaaaattt
 620

<210> 926
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 926
 Thr Arg Ala Leu Cys Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys
 1 5 10 15
 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met
 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val Cys
 35 40 45
 Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Val Cys Leu
 50 55 60
 Cys Val Cys Met Val Met Cys Val Cys Thr Val Trp Cys Val Cys Met
 65 70 75 80
 Cys Val His Val Cys Thr Val Tyr Ala
 85

<210> 927
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 927
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 aagaggcatt tggggctctg ttcagatcat tccaacagca aaccgggcat ggagacccca
 120
 tctcaggtct gtgcttctct gggggccacc cagccatcct gccaccagc tcagaggcag
 180
 ggacaaagcc ctcccaagag gcagcaggca gcaagggtca gccagcgcag tggggacagg
 240
 caggtacaac ctggaaaccc caaaggaccc cagatggcaa tgtgacacgg cccatccacc
 300
 aagcacctgt aatgccggt tccacagag gcgagccaga tcttggcact attctttaag
 360

<210> 928
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 928
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 1 5 10 15
 Gly Val Leu Phe Arg Ser Phe Gln Gln Gln Thr Gly His Gly Asp Pro

	20		25		30										
Ile	Ser	Gly	Leu	Cys	Phe	Ser	Gly	Gly	His	Pro	Ala	Ile	Leu	Pro	Thr
	35		40		45										
Ser	Ser	Glu	Ala	Gly	Thr	Lys	Pro	Ser	Gln	Glu	Ala	Ala	Gly	Ser	Lys
	50		55		60										
Gly	Gln	Pro	Ala	Gln	Trp	Gly	Gln	Ala	Gly	Thr	Thr	Trp	Lys	Pro	Gln
65			70		75									80	
Arg	Thr	Pro	Asp	Gly	Asn	Val	Thr	Arg	Pro	Ile	His	Gln	Ala	Pro	Val
			85		90									95	
Met	Pro	Ala	Ser	His	Arg	Gly	Glu	Pro	Asp	Pro	Gly	Thr	Ile	Leu	
			100		105									110	

<210> 929

<211> 2340

<212> DNA

<213> Homo sapiens

<400> 929

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120
aacaacagcc ggctcaaggc caagggcgtg ggccagcacg acaacgcccc gaactttggg
180
aaccagagct ttgaggagct gcgagcagcc tgtctaagaa agggggagct cttcgaggac
240
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300
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360
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420
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480
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540
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600
cactcaaccg aacgcagtga gttctggagt gccctgctgg agaaggcgta tgccaagctg
660
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720
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960
ggccggattg agtggaatgg agcttggagt gacagtgccg gggagtggga agaggtggcc
1020
tcagacatcc agatgcagct gctgcacaag acggaggagc gggagtcttg gatgtcctac
1080

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 1320
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 1500
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 1740
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<210> 930

<211> 702

<212> PRT

<213> Homo sapiens

<400> 930

Met	Val	Ala	His	Ile	Asn	Asn	Ser	Arg	Leu	Lys	Ala	Lys	Gly	Val	Gly
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Gln	His	Asp	Asn	Ala	Gln	Asn	Phe	Gly	Asn	Gln	Ser	Phe	Glu	Glu	Leu
			20					25				30			
Arg	Ala	Ala	Cys	Leu	Arg	Lys	Gly	Glu	Leu	Phe	Glu	Asp	Pro	Leu	Phe

	35					40					45				
Pro	Ala	Glu	Pro	Ser	Ser	Leu	Gly	Phe	Lys	Asp	Leu	Gly	Pro	Asn	Ser
	50					55					60				
Lys	Asn	Val	Gln	Asn	Ile	Ser	Trp	Gln	Arg	Pro	Lys	Asp	Ile	Ile	Asn
65					70					75					80
Asn	Pro	Leu	Phe	Ile	Met	Asp	Gly	Ile	Ser	Pro	Thr	Asp	Ile	Cys	Gln
				85					90					95	
Gly	Ile	Leu	Gly	Asp	Cys	Trp	Leu	Leu	Ala	Ala	Ile	Gly	Ser	Leu	Thr
			100					105					110		
Thr	Cys	Pro	Lys	Leu	Leu	Tyr	Arg	Val	Val	Pro	Arg	Gly	Gln	Ser	Phe
			115				120					125			
Lys	Lys	Asn	Tyr	Ala	Gly	Ile	Phe	His	Phe	Gln	Ile	Trp	Gln	Phe	Gly
	130					135					140				
Gln	Trp	Val	Asn	Val	Val	Val	Asp	Asp	Arg	Leu	Pro	Thr	Lys	Asn	Asp
145					150					155					160
Lys	Leu	Val	Phe	Val	His	Ser	Thr	Glu	Arg	Ser	Glu	Phe	Trp	Ser	Ala
				165					170					175	
Leu	Leu	Glu	Lys	Ala	Tyr	Ala	Lys	Leu	Ser	Gly	Ser	Tyr	Glu	Ala	Leu
			180					185					190		
Ser	Gly	Gly	Ser	Thr	Met	Glu	Gly	Leu	Glu	Asp	Phe	Thr	Gly	Gly	Val
		195					200					205			
Ala	Gln	Ser	Phe	Gln	Leu	Gln	Arg	Pro	Pro	Gln	Asn	Leu	Leu	Arg	Leu
	210					215					220				
Leu	Arg	Lys	Ala	Val	Glu	Arg	Ser	Ser	Leu	Met	Gly	Cys	Ser	Ile	Glu
225					230					235					240
Val	Thr	Ser	Asp	Ser	Glu	Leu	Glu	Ser	Met	Thr	Asp	Lys	Met	Leu	Val
				245					250					255	
Arg	Gly	His	Ala	Tyr	Ser	Val	Thr	Gly	Leu	Gln	Asp	Val	His	Tyr	Arg
			260					265					270		
Gly	Lys	Met	Glu	Thr	Leu	Ile	Arg	Val	Arg	Asn	Pro	Trp	Gly	Arg	Ile
		275					280					285			
Glu	Trp	Asn	Gly	Ala	Trp	Ser	Asp	Ser	Ala	Arg	Glu	Trp	Glu	Glu	Val
	290					295					300				
Ala	Ser	Asp	Ile	Gln	Met	Gln	Leu	Leu	His	Lys	Thr	Glu	Asp	Gly	Glu
305					310					315					320
Phe	Trp	Met	Ser	Tyr	Gln	Asp	Phe	Leu	Asn	Asn	Phe	Thr	Leu	Leu	Glu
				325					330					335	
Ile	Cys	Asn	Leu	Thr	Pro	Asp	Thr	Leu	Ser	Gly	Asp	Tyr	Lys	Ser	Tyr
			340					345					350		
Trp	His	Thr	Thr	Phe	Tyr	Glu	Gly	Ser	Trp	Arg	Arg	Gly	Ser	Ser	Ala
		355					360					365			
Gly	Gly	Cys	Arg	Asn	His	Pro	Gly	Thr	Phe	Trp	Thr	Asn	Pro	Gln	Phe
	370					375					380				
Lys	Ile	Ser	Leu	Pro	Glu	Gly	Asp	Asp	Pro	Glu	Asp	Asp	Ala	Glu	Gly
385					390					395					


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465          470          475          480
Glu Tyr Ile Ile Ile Pro Ser Thr Phe Glu Pro His Arg Asp Ala Asp
          485          490          495
Phe Leu Leu Arg Val Phe Thr Glu Lys His Ser Glu Ser Trp Glu Leu
          500          505          510
Asp Glu Val Asn Tyr Ala Glu Gln Leu Gln Glu Glu Lys Val Ser Glu
          515          520          525
Asp Asp Met Asp Gln Asp Phe Leu His Leu Phe Lys Ile Val Ala Gly
          530          535          540
Glu Gly Lys Glu Ile Gly Val Tyr Glu Leu Gln Arg Leu Leu Asn Arg
545          550          555          560
Met Ala Ile Lys Phe Lys Ser Phe Lys Thr Lys Gly Phe Gly Leu Asp
          565          570          575
Ala Cys Arg Cys Met Ile Asn Leu Met Asp Lys Asp Gly Ser Gly Lys
          580          585          590
Leu Gly Leu Leu Glu Phe Lys Ile Leu Trp Lys Lys Leu Lys Lys Trp
          595          600          605
Met Asp Ile Phe Arg Glu Cys Asp Gln Asp His Ser Gly Thr Leu Asn
          610          615          620
Ser Tyr Glu Met Arg Leu Val Ile Glu Lys Ala Gly Ile Lys Leu Asn
625          630          635          640
Asn Lys Val Met Gln Val Leu Val Ala Arg Tyr Ala Asp Asp Gly Leu
          645          650          655
Ile Ile Asp Phe Asp Ser Phe Ile Ser Cys Phe Leu Arg Leu Lys Thr
          660          665          670
Met Phe Thr Phe Phe Leu Thr Met Asp Pro Lys Asn Thr Gly His Ile
          675          680          685
Cys Leu Ser Leu Glu Gln Trp Leu Gln Met Thr Met Trp Gly
          690          695          700

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<210> 931

<211> 297

<212> DNA

<213> Homo sapiens

<400> 931

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tcggaaggagg agcctgacat gggccagaaa atcaatcccc atggtttccg tctcggtgtg
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acgaccgatc acaagaccgg ctggtacgcc gagaagcagt acgccgagct cgtgggtgag
120
gatgtcaaga tccgagagtg gctccacaag aatctggagc gcgccggtct ttcgtccatc
180
gagatcgagc gtcgctccga gcgcgtgacc attttccttt acgccgctcg cccggggcatc
240
gttatcgggc gcaatggccg ggaggccgag cgcgtgcgtn ntgagctcga aaagctt
297

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<210> 932

<211> 93

<212> PRT

<213> Homo sapiens

<400> 932

Met Gly Gln Lys Ile Asn Pro His Gly Phe Arg Leu Gly Val Thr Thr

```

1           5           10           15
Asp His Lys Thr Arg Trp Tyr Ala Glu Lys Gln Tyr Ala Glu Leu Val
                20           25           30
Gly Glu Asp Val Lys Ile Arg Glu Trp Leu His Lys Asn Leu Glu Arg
                35           40           45
Ala Gly Leu Ser Ser Ile Glu Ile Glu Arg Arg Ser Glu Arg Val Thr
                50           55           60
Ile Phe Leu Tyr Ala Ala Arg Pro Gly Ile Val Ile Gly Arg Asn Gly
65           70           75           80
Arg Glu Ala Glu Arg Val Arg Xaa Glu Leu Glu Lys Leu
                85           90

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<210> 933

<211> 305

<212> DNA

<213> Homo sapiens

<400> 933

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nnacgcgtcg ccaagctggt gatggccgaa tacaaggggc tcaacgtcat cgtcaaaacc
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tccgccgatc cggcaagcca agccaatgcc gtgcaggatc tggcgggggc aggcacgcac
120
gcgctggcca tctgcccgcac cgacccggat cagctgggtt cggcgatcca gcaggtaag
180
gacgacggca agttcgtggc gctggtcgac cgtgcgcctt cgtcaacga caacacgatc
240
cgcgatctct acgtggccgg caacaacccg gcgctcggcg aagtggcggg caaattcatg
300
ggcga
305

```

<210> 934

<211> 101

<212> PRT

<213> Homo sapiens

<400> 934

```

Xaa Arg Val Ala Lys Leu Leu Met Ala Glu Tyr Lys Gly Leu Asn Val
1           5           10           15
Ile Val Lys Thr Ser Ala Asp Pro Ala Ser Gln Ala Asn Ala Val Gln
                20           25           30
Asp Leu Ala Gly Ala Gly Ile Asp Ala Leu Ala Ile Leu Pro Thr Asp
                35           40           45
Pro Asp Gln Leu Val Ser Ala Ile Gln Gln Val Lys Asp Asp Gly Lys
50           55           60
Phe Val Ala Leu Val Asp Arg Ala Pro Ser Val Asn Asp Asn Thr Ile
65           70           75           80
Arg Asp Leu Tyr Val Ala Gly Asn Asn Pro Ala Leu Gly Glu Val Ala
                85           90           95
Gly Lys Phe Met Gly
                100

```

<210> 935

<211> 333

<212> DNA

<213> Homo sapiens

<400> 935

acgcgtgaag ggctgatgag tgctatgaaa aagccagggg cccgaggaca ctgggggtgga
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 caggctcccc tggggaagtc ctcttagaac tgagggatca aactggagg agactgcaag
 120
 gggtagcgga taaatgttcc tggatgaagga aacagcaggg gcaaaggccc tgcagcagaa
 180
 aggagcgagg ccctttggag taacagaaag accatggtga caggagctca gaaagaccac
 240
 tgggtgttaag actataagcc agtggaggcc agattgggga atgggatggg aggggtgctt
 300
 gaagaccatg gtgaggctct cttggtcttt act
 333

<210> 936

<211> 103

<212> PRT

<213> Homo sapiens

<400> 936

Met	Val	Phe	Lys	His	Pro	Ser	His	Pro	Ile	Pro	Gln	Ser	Gly	Leu	His
1				5					10					15	
Trp	Leu	Ile	Val	Leu	Thr	Pro	Val	Val	Phe	Leu	Ser	Ser	Cys	His	His
			20					25					30		
Gly	Leu	Ser	Val	Thr	Pro	Lys	Gly	Leu	Ala	Pro	Phe	Cys	Cys	Arg	Ala
			35				40					45			
Phe	Ala	Pro	Ala	Val	Ser	Phe	Thr	Arg	Asn	Ile	Tyr	Pro	Val	Pro	Leu
	50					55					60				
Ala	Val	Ser	Ser	Ser	Val	Asp	Pro	Ser	Val	Leu	Arg	Gly	Leu	Pro	Gln
65					70					75				80	
Gly	Ser	Leu	Ser	Thr	Pro	Val	Ser	Ser	Gly	Pro	Trp	Leu	Phe	His	Ser
				85					90					95	
Thr	His	Gln	Pro	Phe	Thr	Arg									
															100

<210> 937

<211> 464

<212> DNA

<213> Homo sapiens

<400> 937

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 ccggcggaag acgagctcaa ggatctgttg acggccgacc tcatggacca gcacaacctc
 120
 gaccgtgccc tggcagggtt gcgtgccagt cacgtcatcg acgaagctcg cgccgaggtg
 180
 cagcggcgtg ccgatctcgc ccgtggccat ctcgccatcc ttcccgcagg cgatgcccg
 240
 acggcggttg agaccctgtg cgacgaggtg ggttcccggg cggcctgaac cccgaccctg
 300

ccagnctgcg tcccatctcc tggccgggac cgctccagcg tetgctctct gacagctcat
 360
 cgttcttccg acaccaagga gtttctcgtg gcccgctcatc tcgatctcat cggcattggg
 420
 cccggcaacc cggactggat caccctgggt gccgtcaagg ccan
 464

<210> 938
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 938
 Xaa Leu Ser Ala Glu Gly Val Ala Thr Leu Pro Thr Leu Met Leu Gln
 1 5 10 15
 Ala Ser Thr Asp Pro Ala Asp Asp Glu Leu Lys Asp Leu Leu Thr Ala
 20 25 30
 Asp Leu Met Asp Gln His Asn Leu Asp Arg Ala Leu Ala Gly Leu Arg
 35 40 45
 Ala Ser His Val Ile Asp Glu Ala Arg Ala Glu Val Gln Arg Arg Ala
 50 55 60
 Asp Leu Ala Arg Gly His Leu Ala Ile Leu Pro Ala Gly Asp Ala Arg
 65 70 75 80
 Thr Ala Leu Glu Thr Leu Cys Asp Glu Val Gly Ser Arg Ala Ala
 85 90 95

<210> 939
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 939
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 120
 acatggcggg ggatcgaggt tggcggctat gaaatccatc acgggcgtct gtcgttcgct
 180
 gaggacgctg aagccttcct cgacggcgta cacgtcggtc cggtatgggg gacgatgtgg
 240
 cacggggcat tcgagcacga cgaattccgt cgcacgtggc tggctgacgc ggcccgtcac
 300
 gctggatcat cctggcgtcc gcaactccgac gagctggggt atcaggctcg acgcgaggcg
 360
 atgacgaaa ccctcgccga cgcgt
 385

<210> 940
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 940
 Xaa Thr Ile Leu Asp Pro Asp Gly Gln Glu Thr Thr Pro Gly Ser Val

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      1           5           10           15
Ile Glu Gly Leu Gly Leu Leu Pro Val Glu Val Asp Phe Ala Ala Thr
      20           25           30
Lys Thr Leu Ala Leu Ser His Gly Thr Trp Arg Gly Ile Glu Val Gly
      35           40           45
Gly Tyr Glu Ile His His Gly Arg Leu Ser Phe Ala Glu Asp Ala Glu
      50           55           60
Ala Phe Leu Asp Gly Val His Val Gly Pro Val Trp Gly Thr Met Trp
      65           70           75           80
His Gly Ala Phe Glu His Asp Glu Phe Arg Arg Thr Trp Leu Ala Asp
      85           90           95
Ala Ala Arg His Ala Gly Ser Ser Trp Arg Pro His Ser Asp Glu Leu
      100          105          110
Gly Tyr Gln Ala Arg Arg Glu Ala Met Ile Glu Thr Leu Ala Asp Ala
      115          120          125

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<210> 941
 <211> 348
 <212> DNA
 <213> Homo sapiens

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<400> 941
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gaagccatgc aaaccatggt cgtgctggcc gggctgccgt tctcgggtgt gctgattttc
120
ttcatgttcg gtttgcacaa ggcgatgcgc caggacgtgg ccatggagca ggagcaggca
180
caattggctg aacgtggtcg ccgtggtttc agcgagcgcc tgaccgcgct ggacctgcaa
240
ccgagccagg gcaccgtgca acgctttatg gacaaacatg tgacgccggc gttggaacaa
300
gcggcgactg cgttgctga tcaagggctg gaagtcaga ccttgctt
348

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<210> 942
 <211> 116
 <212> PRT
 <213> Homo sapiens

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<400> 942
Ile Phe Trp Ser Ala Val Ile Thr Leu Val Thr Ile Gly Leu Leu Phe
      1           5           10           15
Ala Gly Asn Phe Glu Ala Met Gln Thr Met Val Val Leu Ala Gly Leu
      20           25           30
Pro Phe Ser Val Val Leu Ile Phe Phe Met Phe Gly Leu His Lys Ala
      35           40           45
Met Arg Gln Asp Val Ala Met Glu Gln Glu Gln Ala Gln Leu Ala Glu
      50           55           60
Arg Gly Arg Arg Gly Phe Ser Glu Arg Leu Thr Ala Leu Asp Leu Gln
      65           70           75           80
Pro Ser Gln Gly Thr Val Gln Arg Phe Met Asp Lys His Val Thr Pro
      85           90           95
Ala Leu Glu Gln Ala Ala Thr Ala Leu Arg Asp Gln Gly Leu Glu Val

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100 105 110
 Gln Thr Leu Leu
 115
 <210> 943
 <211> 439
 <212> DNA
 <213> Homo sapiens
 <400> 943
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 ctctcttaat gcatcctggg ctcttgctaa cctgtgaggga aacaccgtct cttctctcct
 120
 ttgccctctt ctgtgatcac atcctcactt ctgagcctat ctgcccattcc agtcaatccc
 180
 ccttggttct gggatgctat ttccttgccc gcctcctctt aggagtgttt agaaccctca
 240
 ctgtgggcag aagggaggga agatggctga ggtacctgga aagggacgtg tggatccccg
 300
 ggcatggaag gaaggaggca ggagagctag aaaaagggat gagatctaag gttccctaag
 360
 gaacctggct tagtgctggc ccttcacata ctgagacatg gaatccttac tactgtttct
 420
 tgaggaaaga ggctgttcc
 439
 <210> 944
 <211> 118
 <212> PRT
 <213> Homo sapiens
 <400> 944
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 1 5 10 15
 His Phe Val Pro Leu Met His Pro Gly Leu Leu Leu Thr Leu Trp
 20 25 30
 Glu Thr Pro Ser Leu Leu Ser Phe Ala Leu Phe Cys Asp His Ile Leu
 35 40 45
 Thr Ser Glu Pro Ile Cys Pro Ser Ser Gln Ser Pro Leu Val Leu Gly
 50 55 60
 Cys Tyr Phe Pro Gly Arg Leu Pro Leu Gly Val Phe Arg Thr Leu Thr
 65 70 75 80
 Val Gly Arg Arg Glu Gly Arg Trp Leu Arg Tyr Leu Glu Arg Asp Val
 85 90 95
 Trp Ile Pro Gly His Gly Arg Lys Glu Ala Gly Glu Leu Glu Lys Gly
 100 105 110
 Met Arg Ser Asn Val Pro
 115
 <210> 945
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 945
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 gagatgggtga tatatatata tactcacaca catatatatg tgtgtgtgtg tatatatgta
 120
 tatatatata gcgtgtacaa caaaacatgc actgtttact cagcaccocg tgtttgtctc
 180
 agcaatagct tttctaaaga actgctacta tttgaaatgg agggggaggg gggtcctgga
 240
 cagagtattg tgcaagttga aagtctctgg atggggctat gtatatccta ccagccaatt
 300
 tgggtgcaaa ttggatttga aggcctgcct ctgtccacn
 339

<210> 946
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 946
 Xaa Ile Arg Glu Ala Phe His Ile Phe Phe Leu Leu Ile Ile Ser Ile
 1 5 10 15
 Ala Leu Tyr Val Glu Met Val Ile Tyr Ile Tyr Thr His Thr His Ile
 20 25 30
 Tyr Val Cys Val Cys Ile Tyr Val Tyr Ile Tyr Ser Val Tyr Asn Lys
 35 40 45
 Thr Cys Thr Val Tyr Ser Ala Pro Arg Val Cys Leu Ser Asn Ser Phe
 50 55 60
 Ser Lys Glu Leu Leu Leu Phe Glu Met Glu Gly Glu Gly Gly Pro Gly
 65 70 75 80
 Gln Ser Ile Val Gln Val Glu Ser Leu Trp Met Gly Leu Cys Ile Ser
 85 90 95
 Tyr Gln Pro Ile Trp Val Gln Ile Gly Phe Glu Gly Leu Pro Leu Ser
 100 105 110
 Thr

<210> 947
 <211> 648
 <212> DNA
 <213> Homo sapiens

<400> 947
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 ctctgtggcat cacacctgtg cacgggggtg ggaaggagt ggacaggagt ggacaagtca
 120
 agtagtgctg ccggctcaag cgatgcctca gcctttctgc tgtgtgcgaa gctttgcaga
 180
 ggagatgatg cttcaaagtt gtccctgttg gggatgagca gccaggcctt tatacactgg
 240
 gacagtcagt catggatacg tggatactct ggaaaccctc atccctggag gtctgagccc
 300

ctggatacca tgcccttctt aggctggagt tgetgccctt gtccatttac cataaaaatt
 360
 ggacaagaga ataccaggac acacctgagt ttctcatcgt atgctaaacc tgtttctcca
 420
 cgtacatccc caatgtgtac agccctactt tttctgctg atcaagttca attacttctg
 480
 ctaagatggt gactattctt gcctgctggt ccttggatgc aaggacccca atgttcaggc
 540
 agcctttggt gccttctagc atacgaatca gagcattatc tttagggtgtg gaataagctg
 600
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 648

<210> 948

<211> 154

<212> PRT

<213> Homo sapiens

<400> 948

Met	Glu	Met	Ser	Gly	Gln	Gln	Val	Tyr	Gly	Val	Leu	Val	Ala	Ser	His
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Leu	Cys	Thr	Gly	Val	Gly	Lys	Glu	Trp	Thr	Gly	Val	Asp	Lys	Ser	Ser
			20					25					30		
Ser	Ala	Ala	Gly	Ser	Ser	Asp	Ala	Ser	Ala	Phe	Leu	Leu	Cys	Ala	Lys
			35				40					45			
Leu	Cys	Arg	Gly	Asp	Asp	Ala	Ser	Lys	Leu	Ser	Leu	Leu	Gly	Met	Ser
			50			55					60				
Ser	Gln	Ala	Phe	Ile	His	Trp	Asp	Ser	Gln	Ser	Trp	Ile	Arg	Gly	Tyr
65					70				75					80	
Ser	Gly	Asn	Pro	His	Pro	Trp	Arg	Ser	Glu	Pro	Leu	Asp	Thr	Met	Pro
			85					90						95	
Phe	Leu	Gly	Trp	Ser	Cys	Cys	Pro	Cys	Pro	Phe	Thr	Ile	Lys	Ile	Gly
			100				105						110		
Gln	Glu	Asn	Thr	Arg	Thr	His	Leu	Ser	Phe	Ser	Ser	Tyr	Ala	Lys	Pro
			115				120					125			
Val	Leu	Pro	Arg	Thr	Ser	Pro	Met	Cys	Thr	Ala	Leu	Leu	Phe	Ser	Ala
			130			135					140				
Asp	Gln	Val	Gln	Leu	Leu	Leu	Leu	Arg	Trp						
145						150									

<210> 949

<211> 661

<212> DNA

<213> Homo sapiens

<400> 949

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 120
 atatgctgta acgtttctta acctaggaca gattcaagaa catggctcat cttatattcg
 180
 aggctgtgct tttcaccatg gcttctctcc agcaattgggt gtatttggga cagatggatt
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ggacatagat gacaacatca ttcactttac agtgggggaa ggcataagaa tatgggggaa
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 360
 cagaaaagat ttaagttcaa ctctctggca tgcagcaatt gagataaata gagggaccaa
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 tacagtttta cagaataatg tagtggctgg atttgggaaga gcaggatacc gcattgatgg
 480
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 540
 aggtttatat gggatctata tgaaccaaga tggccttcct ggatgttctc ttatacaagg
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 661

<210> 950

<211> 210

<212> PRT

<213> Homo sapiens

<400> 950

Met	Met	Thr	Phe	Lys	Gly	Asn	Ala	Arg	Ile	Ser	Asn	Val	Glu	Phe	Tyr
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His	Ser	Gly	Gln	Glu	Gly	Phe	Arg	Asp	Ser	Thr	Asp	Pro	Arg	Tyr	Ala
			20					25					30		
Val	Thr	Phe	Leu	Asn	Leu	Gly	Gln	Ile	Gln	Glu	His	Gly	Ser	Ser	Tyr
		35					40					45			
Ile	Arg	Gly	Cys	Ala	Phe	His	His	Gly	Phe	Ser	Pro	Ala	Ile	Gly	Val
	50					55					60				
Phe	Gly	Thr	Asp	Gly	Leu	Asp	Ile	Asp	Asp	Asn	Ile	Ile	His	Phe	Thr
65					70					75				80	
Val	Gly	Glu	Gly	Ile	Arg	Ile	Trp	Gly	Asn	Ala	Asn	Arg	Val	Arg	Gly
			85						90					95	
Asn	Leu	Ile	Ala	Leu	Ser	Val	Trp	Pro	Gly	Thr	Tyr	Gln	Asn	Arg	Lys
			100					105					110		
Asp	Leu	Ser	Ser	Thr	Leu	Trp	His	Ala	Ala	Ile	Glu	Ile	Asn	Arg	Gly
		115					120					125			
Thr	Asn	Thr	Val	Leu	Gln	Asn	Asn	Val	Val	Ala	Gly	Phe	Gly	Arg	Ala
	130					135					140				
Gly	Tyr	Arg	Ile	Asp	Gly	Glu	Pro	Cys	Pro	Gly	Gln	Phe	Asn	Pro	Val
145					150					155				160	
Glu	Lys	Trp	Phe	Asp	Asn	Glu	Ala	His	Gly	Gly	Leu	Tyr	Gly	Ile	Tyr
			165						170					175	
Met	Asn	Gln	Asp	Gly	Leu	Pro	Gly	Cys	Ser	Leu	Ile	Gln	Gly	Phe	Thr
		180						185					190		
Ile	Trp	Thr	Cys	Trp	Asp	Tyr	Gly	Ile	Tyr	Phe	Gln	Thr	Thr	Glu	Ser
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Val	His														
	210														

<210> 951

<211> 2615

<212> DNA

<213> Homo sapiens

<400> 951

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1380
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1440
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1500

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 1980
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 gcagttcttg agcctcatct ggctgggac tccaaggggc ctcttggtt cagtccccac
 2100
 tggccctgag cagcagagcc cttcttacc tcccaggaat gccgtgaaag gagacaaggt
 2160
 ctgcccagcc catgtctatg ctctaccccc agggtagcat ctcagettcc gaaccctggg
 2220
 ctgtttcctt agtcttcatt ttataaaagt tgttgccctt ttaacggagt gtcactttca
 2280
 accggcctcc cctacccttg ctggccgggg atggagacat gtcatttgta aaagcagaaa
 2340
 aagggtgcat ttgttcactt ttgtaatat gtcctggggc tgtgttgggg tggtggggga
 2400
 agctgggcat cagtggccac atgggcatca ggggctggcc ccacagagac ccacagggc
 2460
 agtgagctct gtcttcccc acctgcctag cccatcatct atctaaccgg tccttgattt
 2520
 aataaacact ataaaatgaa gactaaggaa acagcccagg gttcggaagc tgagatgcta
 2580
 ccctgggggt agagcataga catgggtcgg gcaga
 2615

<210> 952

<211> 357

<212> PRT

<213> Homo sapiens

<400> 952

Xaa	Pro	Ala	Pro	Thr	Met	Pro	Trp	Pro	Leu	Leu	Leu	Leu	Ala	Val
1			5					10					15	
Ser	Gly	Ala	Gln	Thr	Thr	Arg	Pro	Cys	Phe	Pro	Gly	Cys	Gln	Cys
			20				25					30		Glu
Val	Glu	Thr	Phe	Gly	Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val
		35				40					45			Asp
Cys	Ser	Gly	Leu	Gly	Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu
	50				55					60				Asp
Thr	Ala	His	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn
														Glu

```

65          70          75          80
Ser Val Leu Ala Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu
          85          90          95
Ser His Asn Leu Leu Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu
          100          105          110
Arg Tyr Leu Glu Ser Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu
          115          120          125
Pro Ala Glu Ser Phe Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser
          130          135          140
His Asn Gln Leu Arg Glu Val Ser Val Ser Ala Phe Thr Thr His Ser
145          150          155          160
Gln Gly Arg Ala Leu His Val Asp Leu Ser His Asn Leu Ser Pro Pro
          165          170          175
Arg Ala Pro Pro His Glu Gly Arg Pro Ala Cys Ala His His Ser Glu
          180          185          190
Pro Glu Pro Gly Leu Glu Pro Ala Pro Cys Arg Ala Gln Pro Arg Asp
          195          200          205
Leu Pro Leu Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile
          210          215          220
Gly Pro Gly Ala Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu
225          230          235          240
Ala Ser Leu Gln Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu
          245          250          255
Leu Pro Gly Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn
          260          265          270
Trp Ala Gly Ala Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu
          275          280          285
Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu
          290          295          300
His Leu Pro Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys
305          310          315          320
Arg Arg Leu Val Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser
          325          330          335
Pro Lys Val Ala Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg
          340          345          350
Gly Pro Thr Ile Leu
          355

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<210> 953

<211> 347

<212> DNA

<213> Homo sapiens

<400> 953

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acgcgtgaag ccacccctgt gcgcaggcca gtctcgcggg ggtcaccacg gagcgtgtgc
60
accacacttt ccccatccct tgatccatca ttgggcgttg aggttttccc atgtcttgac
120
tggtgtacct ggcggctctg cggagtaacc gctgcggaca cacagtagga cgggagggag
180
aagccattgc gtttcaccct ttcattggccc ttcctttccc cttccaagtg agctctttga
240
ggtgagtcac ggagggcagt gtccctctgc atcctgtctg gggttgtcaa atatggccaa
300

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gtgggctcca tcggggcagc ggggtggggtg ggggggtgtct gtcagag
347

<210> 954
<211> 103
<212> PRT
<213> Homo sapiens

<400> 954
Met Glu Pro Thr Trp Pro Tyr Leu Thr Thr Pro Asp Arg Met Gln Arg
1 5 10 15
Asp Thr Ala Leu His Asp Ser Pro Gln Arg Ala His Leu Glu Gly Glu
20 25 30
Arg Lys Gly His Glu Arg Val Lys Arg Asn Gly Phe Ser Leu Pro Ser
35 40 45
Tyr Cys Val Ser Ala Ala Val Thr Pro Gln Ser Arg Gln Val Gln Gln
50 55 60
Ser Arg His Gly Lys Thr Ser Thr Pro Asn Asp Gly Ser Arg Asp Gly
65 70 75 80
Glu Ser Val Val His Thr Leu Arg Gly Asp Pro Arg Glu Thr Gly Leu
85 90 95
Arg Thr Gly Met Ala Ser Arg
100

<210> 955
<211> 634
<212> DNA
<213> Homo sapiens

<400> 955
acgcgtgaag ggctctgcag gtgagcggct ctgcaggtga agggttctgc aggtgagcgg
60
ctctgcaggt gaatggttct gcaggtgaag ggctctgcag gtgaacggtt ctgcaggtga
120
agggctctgc aggtgaacgg ttctgcaggt gagcggctct gcaggtgagc ggctctgcat
180
gtgagtgcct ctgtgactgg ctgcgaagca gcatttgtgc acacttgact ggccacaaca
240
gaatgttctt ctctgttgtc agcactgagg aggaagctcc tgctaagcg accacagcca
300
ggcaccgct ccattggagac attgctctct ccagactcca ttcagactca ggaaacctga
360
gtccttgga tgcaggctga ggcagctccc acacaaaagc tatctactct ggcagttatc
420
agaggcctcc gttgcacaaa tcacacacct actgtgcctg acgtggctgg gcctccagca
480
ggacccgctc ctgagaacac acgggtgcta gtccaagttc acagcacggc tcaagtcact
540
cccacaaacc tctctataca aacacacaaa gctctgggag gctaccctgc atccaagagt
600
caccatctca cacctggaac aagggttacg gccg
634

<210> 956

<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 956
 Met Glu Ser Gly Glu Ser Asn Val Ser Met Glu Arg Val Pro Gly Cys
 1 5 10 15
 Gly Arg Leu Gly Arg Ser Phe Leu Leu Ser Ala Asp Asn Arg Glu Glu
 20 25 30
 His Ser Val Val Ala Ser Gln Val Cys Thr Asn Ala Ala Cys Glu Pro
 35 40 45
 Val Thr Glu Ala Leu Thr Cys Arg Ala Ala His Leu Gln Ser Arg Ser
 50 55 60
 Pro Ala Glu Pro Phe Thr Cys Arg Ala Leu His Leu Gln Asn Arg Ser
 65 70 75 80
 Pro Ala Glu Pro Phe Thr Cys Arg Thr Ile His Leu Gln Ser Arg Ser
 85 90 95
 Pro Ala Glu Pro Phe Thr Cys Arg Ala Ala His Leu Gln Ser Pro Ser
 100 105 110
 Arg

<210> 957
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 957
 acgcgtggcc tgaccaccgt gtcccgccca tctacagggtg cccgagatcg tgagcgtcct
 60
 gcgctccaag cttcaggagg cccagggaga gcacgtcctg ccggccaccc agcacagcgt
 120
 gtacctcctg gccaccacgc actgcgcagc cgtgggtgtcc agcctcctgg gcagccctt
 180
 gcccttggac aggtaccacg ctcagactcc aggccttaggg gtccctctgg aatgatgtc
 240
 cccctggaat gatgtcccc gagccctcca cccggctctg caccctgact ttctgcatga
 300
 gttcccatgg ctgtaggcca cgtgggacag aaagtgcacat ggagccaggc cccagtctct
 360
 caggtagcca cggggacctc tctctccag gcgttttggg atcctcactg gctccgggtg
 420
 gccctgcaca gcacccccac aggggaagctg ctgtttctgc cttcctctaa ggtcccaaaa
 480
 ctgcctgggt gctctgttgg ccccaggctc cagcacacac tggagggtgc ccctcaccct
 540
 gtgtcttggg tccggctact ccaagccttg tctctgcag ggcattccact gctgcctgtg
 600
 agcagacccc tgggaactgc ctgatctgag cccctcagg agcccaagga caaccttgtc
 660
 tgtaccatac atcactatgt cttcccaagc tcacacctcc cagctcccag caaagggcag
 720
 ggcggtgcta ccaccacca gccactggg gtcccccttc ctgcgcgagg cctccggagc
 780

atgggtctgc tggcccttcc tttctttgce tcttagtctg gaa
823

<210> 958
<211> 105
<212> PRT
<213> Homo sapiens

<400> 958
Met Ala Val Gly His Val Gly Gln Lys Val Thr Trp Ser Gln Ala Pro
1 5 10 15
Val Ser Gln Val Pro Thr Gly Thr Ser Pro Leu Gln Ala Phe Trp Asp
20 25 30
Pro His Trp Leu Arg Trp Ala Leu His Ser Thr Pro Thr Gly Lys Leu
35 40 45
Leu Phe Leu Pro Ser Ser Lys Val Pro Lys Leu Pro Gly Cys Ser Val
50 55 60
Gly Pro Arg Leu Gln His Thr Leu Glu Ala Ala Pro His Pro Val Ser
65 70 75 80
Trp Phe Arg Leu Leu Gln Ala Leu Ser Ser Ala Gly His Pro Leu Leu
85 90 95
Pro Val Ser Arg Pro Leu Gly Thr Ala
100 105

<210> 959
<211> 586
<212> DNA
<213> Homo sapiens

<400> 959
ngtcatgact gcatggccaa gcatgactcc aacaccatca ttaagtttgc cgacgacaca
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acagtggtag gcctgatcac cgacaacgat gaggcagcct atagggagga ggtcagagac
120
ctggcagtgt ggtgccagga taacaacctc tccctcaacg tgatcaagac cacgaagatg
180
atcgtggact acaggaaaag gagggctogag cacgccccca ttctcattga tggggctgta
240
tgaggagccag ttgagagctt caagtccctt ggtgtccaca tcaccatcga actatcatgg
300
tccaaacaca ccaagacagt agtgaagagg gtgcgacaat gcctattcca cctcggtaga
360
caaaaaagat ttggaatgga tcctcagacc ctcaaaaagt ttgacatcta caccatcgag
420
agcatcatga ctggttgcac caccgcctgg tatggcaact gctcggcctc cgaccgcaag
480
gcactacaga gggtagtgcg tacggcccag tacatcactg gggctaagct tcctgccatc
540
caggacctct ataccaggcg gtgtcagcgg aagaccctga caattg
586

<210> 960
<211> 195
<212> PRT

<213> Homo sapiens

<400> 960

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Xaa His Asp Cys Met Ala Lys His Asp Ser Asn Thr Ile Ile Lys Phe
 1           5           10           15
Ala Asp Asp Thr Thr Val Val Gly Leu Ile Thr Asp Asn Asp Glu Ala
          20           25           30
Ala Tyr Arg Glu Glu Val Arg Asp Leu Ala Val Trp Cys Gln Asp Asn
          35           40           45
Asn Leu Ser Leu Asn Val Ile Lys Thr Thr Lys Met Ile Val Asp Tyr
          50           55           60
Arg Lys Arg Arg Val Glu His Ala Pro Ile Leu Ile Asp Gly Ala Val
65           70           75           80
Trp Glu Pro Val Glu Ser Phe Lys Phe Leu Gly Val His Ile Thr Ile
          85           90           95
Glu Leu Ser Trp Ser Lys His Thr Lys Thr Val Val Lys Arg Val Arg
          100          105          110
Gln Cys Leu Phe His Leu Gly Arg Gln Lys Arg Phe Gly Met Asp Pro
          115          120          125
Gln Thr Leu Lys Lys Phe Asp Ile Tyr Thr Ile Glu Ser Ile Met Thr
          130          135          140
Gly Cys Ile Thr Ala Trp Tyr Gly Asn Cys Ser Ala Ser Asp Arg Lys
145          150          155          160
Ala Leu Gln Arg Val Val Arg Thr Ala Gln Tyr Ile Thr Gly Ala Lys
          165          170          175
Leu Pro Ala Ile Gln Asp Leu Tyr Thr Arg Arg Cys Gln Arg Lys Thr
          180          185          190
Leu Thr Ile
          195

```

<210> 961

<211> 502

<212> DNA

<213> Homo sapiens

<400> 961

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acgcgttggtc gtctctccgt agaccattca gtttggcaaa acttccactg gagtctgtgc
60
atgactggat ggtctctttg acagccctgt caaggaatac caacagaata ttgattctcc
120
taaactgtat agtaacctgc taaccagtcg gaaagagcta ccaccaatg gagatactaa
180
atccatggta atggaccatc gagggcaacc tccagagttg gctgctcttc ccactcctga
240
gtctacaccc gtgcttcacc agaagaccct gcaggccatg aagagccact cagaaaaggc
300
ccatggccat ggagcttcaa ggaaagaaac ccctcagttt tttccgtcta gtccgccacc
360
tcattcccca ataagtcatg ggcataatcc cagtgccatt gttcttccaa atgctaccca
420
tgactacaac acgtctttct caaactccaa tgctcacaaa gctgaaaaga agcttcaaaa
480
cattgatcac cccttcacgc gt
502

```



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<400> 963
nntcgcgagc acactccagc ctctggggag caggccacag aacgcagggt gaaacccaag
60
gcgctctaga ggagatgaat tatggatccg cctccccgga atcctggctc ggccctcccc
120
acgccacca gggccagtcg ggtctgctca cagcccaggg aggccgcgtg tccagccgcg
180
ggcaagagac agagcaggtc cctgtgtatc caagtccctg agcccgtgac accggcccca
240
ggccctgtag agagccagca gccaccatgg cgaaggagga agatgaggag aagaaagcca
300
agaaagggaa gaaggggaag aaggcaccgg acccggagaa gcccaaacgg agcctgaagg
360
ggacgtcgcg ggtgttcatg ggcttcgcg accgaacacc caagatctac aagaagggcc
420
agttccgcag cgctcggcc ttcttctggg gcctccacac cggcccccac aagaccaagc
480
gcacgaggaa ggcccgccac gtgctcgggt acacgtcaga gcttatgacg cacatgcgca
540
tgggcaagaa gaagcgggcg atgaagggca agaagccgtc cttcatggtg atccgcttcc
600
caggccgcgc tggctacggc cgctcgggc cgcgcgcccg gtcactcagc aaagcgacca
660
cggccatcaa ctggctcaca aaaaagttcc tcctcaagaa ggccgaggag tcgggcagcg
720
aacaggccac agtggacgcc tggctgcagc gctcgagctc ccgcatgggc tcccgc aaac
780

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tccccctccc gtcgggtgcc gagatcctgc ggcctggggg ccggctccgg aggttcccc
 840
 gcagccgcag catctacgcg tcaggcgagc cctggggctt cctgcccttc gaggacgagg
 900
 cccattcca tcaactgggc tcccgaagt cgctgtacgg gcttgagggc ttccaggacc
 960
 tgggcgagta ttatgactat caccgcgacg gcgacgacta ctacgaccgg cagtcaactcc
 1020
 accgctacga ggagcaggaa ccctacctgg cgggcctcgg ccctacagc ccggcctggc
 1080
 caccctacgg cgaccactac tacgggtacc cggccgagga tccctacgac tactaccacc
 1140
 ccgactatta cggtggtccc gttgatccgg ggtacaccta cggctacggc tacgacgatt
 1200
 acgaaccccc atatgcgccc ccgtcggggg actcgtctcc ttacagctac cacgatgggt
 1260
 acgagggcga ggcgcaccct tatggctact acctggat
 1298

<210> 964

<211> 235

<212> PRT

<213> Homo sapiens

<400> 964

Ser	Ala	Ser	Gln	Ala	Ala	Val	Ala	Thr	Ala	Ala	Cys	Gly	Arg	Ala	Pro
1			5					10						15	
Gly	His	Ser	Ala	Lys	Arg	Pro	Arg	Pro	Ser	Thr	Gly	Ser	Gln	Lys	Ser
			20					25					30		
Ser	Ser	Ser	Arg	Arg	Pro	Arg	Ser	Arg	Ala	Ala	Asn	Arg	Pro	Gln	Trp
			35				40					45			
Thr	Pro	Gly	Cys	Ser	Ala	Arg	Ala	Pro	Ala	Trp	Ala	Pro	Ala	Asn	Ser
	50					55					60				
Pro	Ser	Arg	Arg	Val	Pro	Arg	Ser	Cys	Gly	Leu	Gly	Ala	Gly	Ser	Gly
65				70					75					80	
Gly	Ser	Pro	Ala	Ala	Ala	Ala	Ser	Thr	Arg	Gln	Ala	Ser	Pro	Trp	Ala
			85					90						95	
Ser	Cys	Pro	Ser	Arg	Thr	Arg	Pro	His	Ser	Ile	Thr	Arg	Ala	Pro	Ala
			100					105					110		
Ser	Arg	Cys	Thr	Gly	Leu	Arg	Ala	Ser	Arg	Thr	Trp	Ala	Ser	Ile	Met
			115				120					125			
Thr	Ile	Thr	Ala	Thr	Ala	Thr	Thr	Thr	Thr	Thr	Gly	Ser	His	Ser	Thr
	130					135					140				
Ala	Thr	Arg	Ser	Arg	Asn	Pro	Thr	Trp	Arg	Ala	Ser	Ala	Pro	Thr	Ala
145					150				155					160	
Arg	Pro	Gly	His	Pro	Thr	Ala	Thr	Thr	Thr	Thr	Gly	Thr	Arg	Pro	Arg
			165					170						175	
Ile	Pro	Thr	Thr	Thr	Thr	Thr	Pro	Thr	Ile	Thr	Val	Ala	Pro	Leu	Ile
			180				185					190			
Arg	Gly	Thr	Pro	Thr	Ala	Thr	Ala	Thr	Thr	Ile	Thr	Asn	Pro	His	Met
	195					200						205			
Arg	Pro	Arg	Arg	Gly	Thr	Arg	Leu	Leu	Thr	Ala	Thr	Thr	Met	Gly	Thr
	210					215					220				
Arg	Ala	Arg	Arg	Thr	Leu	Met	Ala	Thr	Thr	Trp					

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225                               230                               235

<210> 965
<211> 336
<212> DNA
<213> Homo sapiens

<400> 965
nnngtgacca ttatgggtgg tgcccggtacc cgtgaagtgg aaggcggtga ttttgttggc
60
cgggtcagcg atgccgaaaa ggctgaaatc ctcggccgcg ccgatgtgta tgtcgccccc
120
aataccggcg gtgagagctt tggcattgtc ttggtggaag ccatggcggc aggcgcagcc
180
gttgttgctt cagacttggg ggccttcgcg gcagtgtgca acgccgattc cgatgatgtt
240
gccggcgcgc tatatcgcaa tgaggatagt aatgaccttg ctcgtgtact caacgaggtg
300
ctcgaggatc ctgagtatcg tgcccgctta gtgcac
336

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<210> 966
<211> 112
<212> PRT
<213> Homo sapiens
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<400> 966															
Xaa	Val	Thr	Ile	Met	Gly	Gly	Ala	Arg	Thr	Arg	Glu	Val	Glu	Gly	Val
1				5					10					15	
Asp	Phe	Val	Gly	Arg	Val	Ser	Asp	Ala	Glu	Lys	Ala	Glu	Ile	Leu	Gly
			20					25					30		
Arg	Ala	Asp	Val	Tyr	Val	Ala	Pro	Asn	Thr	Gly	Gly	Glu	Ser	Phe	Gly
		35					40					45			
Ile	Val	Leu	Val	Glu	Ala	Met	Ala	Ala	Gly	Ala	Ala	Val	Val	Ala	Ser
	50					55				60					
Asp	Leu	Glu	Ala	Phe	Arg	Ala	Val	Cys	Asn	Ala	Asp	Ser	Asp	Asp	Val
65					70					75				80	
Ala	Gly	Ala	Leu	Tyr	Arg	Asn	Glu	Asp	Ser	Asn	Asp	Leu	Ala	Arg	Val
			85						90					95	
Leu	Asn	Glu	Val	Leu	Glu	Asp	Pro	Glu	Tyr	Arg	Ala	Arg	Leu	Val	His
			100					105					110		

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<210> 967
<211> 393
<212> DNA
<213> Homo sapiens
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<400> 967
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ggcgcgaggagg cgtcgggctc aagctccgct tcggcaccgg tcggcactga ggaatctccg
120
tcggcctccg cttcggccgc agcctgggct gcgccagact ctgcgggagg caccttctcc
180
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cgggttcgcc agccaaatgg cgttgcaggc tccagcatcc agtccggtgc cttcggcacc
 240
 cccgcactgc gcagagaggg cgccagaaac gatggcaccg gcggcgcggg aggtgataca
 300
 ggcgcttcgg ccggagcgct cacggactcc ggcactacag gtgcagcttg cgcttcctgc
 360
 ggcggagcaa cagggtcact tcgaggcggg gat
 393

<210> 968
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 968
 Pro Ala Arg Ser Asp Thr Glu Leu Val Val Ser Thr Asp Ser Gly Ala
 1 5 10 15
 Glu Ala Ser Gly Ser Ser Ser Ala Ser Ala Pro Val Gly Thr Glu Glu
 20 25 30
 Ser Pro Ser Ala Ser Ala Ser Ala Ala Ala Trp Ala Ala Pro Asp Ser
 35 40 45
 Ala Gly Gly Thr Phe Ser Arg Val Arg Gln Pro Asn Gly Val Ala Gly
 50 55 60
 Ser Ser Ile Gln Ser Gly Ala Phe Gly Thr Pro Ala Leu Arg Arg Glu
 65 70 75 80
 Ala Ala Arg Asn Asp Gly Thr Gly Gly Ala Gly Gly Asp Thr Gly Ala
 85 90 95
 Ser Ala Gly Ala Leu Thr Asp Ser Gly Thr Thr Gly Ala Ala Cys Ala
 100 105 110
 Ser Cys Gly Gly Ala Thr Gly Ser Leu Arg Gly Gly Asp
 115 120 125

<210> 969
 <211> 880
 <212> DNA
 <213> Homo sapiens

<400> 969
 caattgtcat gcaggacacc aaagatgaac acaggcttca cagtggcaaa ctctgtctga
 60
 ttatccttac atgtattgca gaggatcaat atgaccatgc atttttgcat gatgatcaac
 120
 atgaattttc gagtaaaactt acatagaatg cctatgagac acaggaagaa ggcagcagac
 180
 aagaatctta ccctgccgtc tttagtatgt gaagtactgg acctgatggg agagttttatt
 240
 gtaacacaca tgatgaagga gtttcctatg gatctctata tacgctgcat ccaggtagta
 300
 cacaaactgc tctgctacca gaagaagtgt cgggtacgcc tgcattacac ctggcgggag
 360
 ctctggtcag ccttgataaa tttgctgaag ttccttatgt caaatgagac tgtacttttg
 420
 gccaaacaca acattttttac attagccctt atgattgtga acctatttaa tatgtttatc
 480

acatatggcg acacatttct gccaaccccc agcagctatg atgaacttta ctatgagatt
 540
 atccgcatgc accagagctt tgacaacctc tactccatgg tcttgaggct ttctaccaat
 600
 gcaggccagt ggaaggaagc agctagcaag gtgacccatg cattgggttaa tatcagagcc
 660
 atcatcaacc actttaaccc caaaattgag tcctacgctg ctgtgaatca catatcccaa
 720
 ctgtcagagg agcaggtgct ggaggtggtg agagccaact atgacacgct cacgctgaag
 780
 ctgcaggatg gcctggacca gtatgagcgc tactcagagc agcacaagga agctgccttc
 840
 ttcaaagagc tggttcgatc cattagcacc aacgtccgga
 880

<210> 970

<211> 263

<212> PRT

<213> Homo sapiens

<400> 970

Met	Thr	Met	His	Phe	Cys	Met	Met	Ile	Asn	Met	Asn	Phe	Arg	Val	Asn
1				5					10					15	
Leu	His	Arg	Met	Pro	Met	Arg	His	Arg	Lys	Lys	Ala	Ala	Asp	Lys	Asn
			20					25					30		
Leu	Thr	Leu	Pro	Ser	Leu	Val	Cys	Glu	Val	Leu	Asp	Leu	Met	Val	Glu
		35					40					45			
Phe	Ile	Val	Thr	His	Met	Met	Lys	Glu	Phe	Pro	Met	Asp	Leu	Tyr	Ile
	50					55					60				
Arg	Cys	Ile	Gln	Val	Val	His	Lys	Leu	Leu	Cys	Tyr	Gln	Lys	Lys	Cys
65					70					75					80
Arg	Val	Arg	Leu	His	Tyr	Thr	Trp	Arg	Glu	Leu	Trp	Ser	Ala	Leu	Ile
			85						90					95	
Asn	Leu	Leu	Lys	Phe	Leu	Met	Ser	Asn	Glu	Thr	Val	Leu	Leu	Ala	Lys
			100						105					110	
His	Asn	Ile	Phe	Thr	Leu	Ala	Leu	Met	Ile	Val	Asn	Leu	Phe	Asn	Met
		115						120					125		
Phe	Ile	Thr	Tyr	Gly	Asp	Thr	Phe	Leu	Pro	Thr	Pro	Ser	Ser	Tyr	Asp
	130					135						140			
Glu	Leu	Tyr	Tyr	Glu	Ile	Ile	Arg	Met	His	Gln	Ser	Phe	Asp	Asn	Leu
145					150					155					160
Tyr	Ser	Met	Val	Leu	Arg	Leu	Ser	Thr	Asn	Ala	Gly	Gln	Trp	Lys	Glu
				165					170					175	
Ala	Ala	Ser	Lys	Val	Thr	His	Ala	Leu	Val	Asn	Ile	Arg	Ala	Ile	Ile
			180						185					190	
Asn	His	Phe	Asn	Pro	Lys	Ile	Glu	Ser	Tyr	Ala	Ala	Val	Asn	His	Ile
		195					200					205			
Ser	Gln	Leu	Ser	Glu	Glu	Gln	Val	Leu	Glu	Val	Val	Arg	Ala	Asn	Tyr
	210					215					220				
Asp	Thr	Leu	Thr	Leu	Lys	Leu	Gln	Asp	Gly	Leu	Asp	Gln	Tyr	Glu	Arg
225					230					235					240
Tyr	Ser	Glu	Gln	His	Lys	Glu	Ala	Ala	Phe	Phe	Lys	Glu	Leu	Val	Arg
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Ser	Ile	Ser	Thr	Asn	Val	Arg									

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<210> 971
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 971
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 120
 aatcccaacc ccaaatacct ggttggttaac ggagacgaat ccgaacccgg cacgtgcaag
 180
 gacatgccgc tcattatggc aagcccgac acgcttgctg aaggtgctct tatctccgcg
 240
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 337

<210> 972
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 972
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 20 25 30
 Lys Trp Ser Phe Val Pro Gln Asn Asn Pro Asn Pro Lys Tyr Leu Val
 35 40 45
 Val Asn Gly Asp Glu Ser Glu Pro Gly Thr Cys Lys Asp Met Pro Leu
 50 55 60
 Ile Met Ala Ser Pro His Thr Leu Val Glu Gly Ala Leu Ile Ser Arg
 65 70 75 80
 Tyr Ala Phe Gly Ser Glu Gln Ala Phe Ile Tyr Leu Arg Gly Glu Val
 85 90 95
 Val Gln Val Ala Arg Arg Leu Glu Glu Lys Lys Lys Met Arg Xaa Xaa
 100 105 110

<210> 973
 <211> 360
 <212> DNA
 <213> Homo sapiens

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 120
 ccgggacctt ctgtataggc atcacttagg aaccagtcag accatcagat tctcaggacc
 180

cactggatca actgagtcag gaactcaggg ttttcaacac atcctccggg gggattccag
 240
 tggctgtgta actttgagga ccactggcaa agtggctctg gggtcagaga tccgagttca
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 360

<210> 974

<211> 91

<212> PRT

<213> Homo sapiens

<400> 974

Met	Ala	Trp	Ser	Cys	Cys	Met	Val	Leu	Ser	Gly	Val	Arg	Asp	Leu	Leu
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Tyr	Arg	His	His	Leu	Gly	Thr	Ser	Gln	Thr	Ile	Arg	Phe	Ser	Gly	Pro
			20					25					30		
Thr	Gly	Ser	Thr	Glu	Ser	Gly	Thr	Gln	Gly	Phe	Gln	His	Ile	Leu	Arg
			35				40					45			
Gly	Asp	Ser	Ser	Gly	Cys	Val	Thr	Leu	Arg	Thr	Thr	Gly	Lys	Val	Ala
	50					55					60				
Leu	Gly	Ser	Glu	Ile	Arg	Val	His	Ile	Leu	Gly	Leu	Pro	Leu	Thr	Asp
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Cys	Asn	Gly	Gly	Gln	Val	Thr	Cys	Arg	Ala	Gln					
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<210> 975

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 975

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 120
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 240
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 300
 aacgtggtgc gaaggggtgtt tggccgcac cggcgctttt tcagtcgcag gcggaatgag
 360
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 420
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 480
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 540
 aaacaaatcc cccaggttgt tgaggcttgc tgccaattca ttgaaaaaca tggttaagc
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 660

ttt gat caag gtctggatgt agtgctggat gacaatcaga atgtgcatga tgtggctgca
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1080
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1200
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1260
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1980
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2280

ccaagtaggt aaagtcactt gattacaaat gttcttaact atcgtctctg taattccttt
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 2580
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 2604

<210> 976
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 976
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 Arg Arg Asn Glu Pro Thr Leu Pro Arg Glu Phe Thr Arg Arg Gly Arg
 35 40 45
 Arg Gly Ala Val Ser Val Asp Ser Leu Ala Glu Leu Glu Asp Gly Ala
 50 55 60
 Leu Leu Leu Gln Thr Leu Gln Leu Ser Lys Ile Ser Phe Pro Ile Gly
 65 70 75 80
 Gln Arg Leu Leu Gly Ser Lys Arg Lys Met Ser Leu Asn Pro Ile Ala
 85 90 95
 Lys Gln Ile Pro Gln Val Val Glu Ala Cys Cys Gln Phe Ile Glu Lys
 100 105 110
 His Gly Leu Ser Ala Val Gly Ile Phe Thr Leu Glu Tyr Ser Val Gln
 115 120 125
 Arg Val Arg Gln Leu Arg Glu Phe Asp Gln Gly Leu Asp Val Val
 130 135 140
 Leu Asp Asp Asn Gln Asn Val His Asp Val Ala Ala Leu Leu Lys Glu
 145 150 155 160
 Phe Phe Arg Asp Met Lys Asp Ser Leu Leu Pro Asp Asp Leu Tyr Met
 165 170 175
 Ser Phe Leu Leu Thr Ala Thr Leu Lys Pro Gln Asp Gln Leu Ser Ala
 180 185 190
 Leu Gln Leu Leu Val Tyr Leu Thr Pro Pro Cys His Ser Asp Thr Leu
 195 200 205
 Glu Arg Leu Leu Lys Ala Leu His Lys Ile Thr Glu Asn Cys Glu Asp
 210 215 220
 Ser Ile Gly Ile Asp Gly Gln Leu Val Pro Gly Asn Arg Met Thr Ser
 225 230 235 240
 Thr Asn Leu Ala Leu Val Phe Gly Ser Ala Leu Leu Lys Lys Gly Lys
 245 250 255
 Phe Gly Lys Arg Glu Ser Arg Lys Thr Lys Leu Gly Ile Asp His Tyr
 250 265 270
 Val Ala Ser Val Asn Val Val Arg Ala Met Ile Asp Asn Trp Asp Val

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      275              280              285
Leu Phe Gln Val Pro Pro His Ile Gln Arg Gln Val Ala Lys Arg Val
      290              295              300
Trp Lys Ser Ser Pro Glu Ala Leu Asp Phe Ile Arg Arg Arg Asn Leu
      305              310              315              320
Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu
      325              330              335
Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala
      340              345              350
Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro
      355              360              365
Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro
      370              375              380
Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys
      385              390              395              400
Glu Ala Lys Thr Gly Val Ser Tyr Phe Phe Pro
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<210> 977

<211> 378

<212> DNA

<213> Homo sapiens

<400> 977

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180
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240
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378

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<210> 978

<211> 126

<212> PRT

<213> Homo sapiens

<400> 978

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Arg Val Lys Gly Ala Ile Gln Arg Ser Thr Glu Thr Gly Leu Ala Val
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      20              25              30
Asp Ser Met Asn Ser Tyr Gly Ser Glu Gly Asn Leu Asn Tyr Gly Gly
      35              40              45
Val Cys Leu Ala Ser Asp Ala Gln Phe Ser Asp Phe Leu Gly Ser Met
      50              55              60
Gly Pro Ala Gln Phe Val Gly Arg Gln Thr Leu Ala Thr Thr Pro Met

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65          70          75          80
Gly Asp Val Glu Ile Gly Leu Gln Glu Arg Asn Gly Gln Leu Glu Val
          85          90          95
Asp Ile Ile Gln Ala Arg Gly Leu Thr Ala Lys Pro Gly Ser Lys Thr
          100          105          110
Leu Pro Ala Ala Tyr Ile Lys Ala Tyr Leu Leu Glu Met Ala
          115          120          125

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<210> 979

<211> 3500

<212> DNA

<213> Homo sapiens

<400> 979

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120
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720
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1140
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1200

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<210> 980

<211> 73

<212> PRT

<213> Homo sapiens

<400> 980

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Leu	Ala	Gln	Gly	Arg	Gly	Cys	Arg	Gln	Gly	Lys	Gly	His	Trp	Pro	Pro
		20						25					30		
Cys	Phe	Gln	Val	Leu	Thr	Ala	Ser	Gly	Trp	Ser	Leu	Glu	Ala	Thr	Glu
		35					40					45			
Glu	Arg	Asn	Ala	Trp	Leu	Arg	Ala	Ala	Glu	His	Ser	Glu	Ala	Ser	Arg
	50					55					60				
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<210> 981

<211> 404

<212> DNA

<213> Homo sapiens

<400> 981

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 180

accgcactcg cggaggcggg tgcgcgaggc ggggcgggta accaccggtt tggaggagac
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<210> 982

<211> 134

<212> PRT

<213> Homo sapiens

<400> 982

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Pro	Asp	Pro	His	Ala	Trp	Asp	Leu	Cys	Glu	Arg	His	Ser	Ala	His	Ile
			20					25					30		
Thr	Ala	Pro	Val	Gly	Trp	Glu	Leu	Val	Arg	Val	Glu	His	Val	Glu	Leu
			35				40						45		
Asp	Asp	Glu	Asp	Val	Asp	Asp	Glu	Asn	Thr	Asp	Ile	Thr	Ala	Leu	Ala
	50					55					60				
Glu	Ala	Gly	Ala	Arg	Gly	Gly	Ala	Gly	Asn	His	Arg	Phe	Gly	Gly	Asp
65					70					75				80	
Arg	Pro	Gly	Ser	Asp	Arg	Val	Leu	Gly	Arg	Gln	Arg	Leu	Gln	Gln	Pro
				85					90					95	
Arg	His	Leu	Gln	Pro	Ser	Gly	Ala	Pro	Asp	Gln	Ala	Cys	Gly	Gly	Thr
			100					105						110	
Ala	Ser	Gly	Ala	Gln	Gly	Gly	Ala	Pro	Leu	Pro	Pro	Ala	His	Cys	Pro
		115					120					125			
Gly	Ser	Glu	Pro	Gly	Arg										
															130

<210> 983

<211> 579

<212> DNA

<213> Homo sapiens

<400> 983

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 120
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 240
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 360
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 420

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 579

<210> 984
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 984
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<210> 985
 <211> 313
 <212> DNA
 <213> Homo sapiens

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<210> 986
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 986
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Asp Ala Leu Pro Val Asp Gln Gln Val Ala Phe Phe Leu Asn Asn Met			
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<210> 987

<211> 4224

<212> DNA

<213> Homo sapiens

<400> 987

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<210> 988
 <211> 873
 <212> PRT
 <213> Homo sapiens

<400> 988

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Met	Leu	Leu	Arg	Gly	Leu	Thr	Gln	Ile	Gln	Ser	Arg	Ile	Leu	Gly	Pro
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Gly	Arg	Lys	Cys	Cys	Ala	Leu	Ala	Asn	Leu	Ala	Asp	Met	Leu	Thr	Val
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Phe	Ala	Leu	Thr	Glu	Asp	Asp	Pro	Gln	Glu	Val	Ser	Ala	Thr	Val	Tyr
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Leu	Asp	Lys	Leu	Ala	Thr	Val	Ile	Ser	Val	Trp	Asn	Ser	Asp	Thr	Gln
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Asn	Pro	Tyr	His	Gln	Gln	Ala	Leu	Ala	Glu	Lys	Val	Lys	Glu	Ala	Glu
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Tyr	Arg	Leu	Cys	Asp	Ser	Leu	Thr	Ser	Phe	Ser	Gln	Asn	Ala	Thr	Leu
				165					170					175	
Tyr	Leu	Asn	Arg	Thr	Ser	Leu	Ser	Lys	Glu	Asp	Arg	Gln	Val	Val	Ser
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Val	Ile	Gln	Gln	Lys	Met	Asp	Arg	His	Met	Glu	Val	Cys	Tyr	Ile	Phe
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Phe	Gln	Glu	Asp	Leu	Asn	Thr	Thr	Phe	Asn	Gln	Leu	Thr	Gln	Ser	Ala
			340					345					350		
Ser	Glu	Gln	Gly	Leu	Ala	Lys	Ala	Val	Ala	Ser	Val	Ala	Arg	Leu	Val
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Pro	Ala	Leu	Arg	Phe	Val	Glu	Val	Gln	Gly	Pro	Asn	Ser	Ser	Ala	Thr
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Phe	Met	Val	Ser	Cys	Leu	Lys	Glu	Thr	Val	Trp	Met	Lys	Phe	Ser	Thr
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Pro	Val	Lys	Pro	Gln	Gly	Ile	Pro	Val	Ala	Ala	Leu	Leu	Glu	Pro	Asp
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Glu	Val	Asp	Leu	Ser	Leu	Arg	Ile	Phe	Ile	Gln	Thr	Leu	Glu	Ala	Asn
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Ala	Cys	Arg	Glu	Glu	Tyr	Trp	Leu	Gln	Thr	Cys	Ser	Pro	Phe	Pro	Leu
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Leu	Phe	Ser	Leu	Cys	Gln	Leu	Leu	Asp	Arg	Phe	Ser	Lys	Tyr	Trp	Gln
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Ile	His	Ile	Leu	Glu	Leu	Cys	Glu	Ile	Val	Ser	Ala	Asn	Ala	Glu	
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Thr	Phe	Ser	Pro	Asp	Val	Trp	Ile	Lys	Ser	Leu	Ser	Trp	Leu	His	Arg
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Cys	Lys	Leu	Ser	Glu	Asp	Glu	Trp	Thr	Ser	Gln	Ala	His	Pro	Gly	Tyr
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Gly	Ala	Gly	Thr	Gly	Leu	Leu	Ala	Trp	Met	Glu	Cys	Cys	Cys	Val	Ser
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Asn	Pro	Glu	Glu	Val	Arg	Leu	Phe	Ser	Lys	Gly	Phe	Leu	Val	Ala	Leu
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Val	Gln	Val	Met	Pro	Trp	Cys	Ser	Pro	Gln	Glu	Trp	Gln	Arg	Leu	His
	675					680						685			
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	690				695							700			
Ser	Leu	Glu	Tyr	Ile	Gln	Phe	Val	Pro	Leu	Leu	Asn	Leu	Lys	Pro	Phe
705				710					715						720
Ala	Gln	Glu	Leu	Gln	Leu	Ser	Val	Leu	Phe	Leu	Arg	Thr	Phe	Gln	Phe
			725						730						735
Leu	Cys	Ser	His	Ser	Cys	Arg	Asn	Trp	Leu	Pro	Leu	Glu	Gly	Trp	Asn
	740							745					750		
His	Val	Val	Lys	Leu	Leu	Cys	Gly	Ser	Leu	Thr	Arg	Leu	Leu	Asp	Ser
	755					760						765			
Val	Arg	Ala	Ile	Gln	Ala	Ala	Gly	Pro	Trp	Val	Gln	Gly	Pro	Glu	Gln
	770				775						780				
Asp	Leu	Thr	Gln	Glu	Ala	Leu	Phe	Val	Tyr	Thr	Gln	Val	Phe	Cys	His
785				790					795						800
Ala	Leu	His	Ile	Met	Ala	Met	Leu	His	Pro	Glu	Val	Cys	Glu	Pro	Leu

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Thr Asn Pro Ser Val Ser Ser Leu Leu Gln Arg Ala His Glu Gln Cys
      835      840      845
Phe Leu Lys Ser Ile Ala Glu Gly Ile Gly Pro Glu Glu Arg Arg Gln
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<210> 990
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 <213> Homo sapiens

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Arg Arg Val Ala Leu Cys Lys Leu Leu Ile Glu Gln Pro Asp Leu Leu
      35      40      45
Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ala Glu Ser Val Asn Trp
      50      55      60
Leu Glu Gly His Leu Lys Ser Tyr Pro Gly Ala Val Leu Ala Val Thr
      65      70      75      80
His Asp Arg Tyr Phe Leu Asp His Val Ala Glu Trp Ile Cys Glu Val
      85      90      95
Asp Arg Gly Gln Leu His Pro Tyr Glu Gly Asn Tyr Ser Thr Tyr Leu
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Arg Ala Lys Ile Leu Glu

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130

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 <213> Homo sapiens

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<210> 994

<211> 110

<212> PRT

<213> Homo sapiens

<400> 994

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Tyr	Leu	Ser	Gln	Asp	Tyr	Ile	Gly	Glu	Leu	Pro	Lys	Gln	His	Ile	Ser
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Leu	Gly	Lys	Phe	Asp	Pro	Asp	Asn	Ile	Pro	Ala	Asp	Pro	Asn	Glu	Leu
			50				55				60				
Phe	Ala	Thr	Trp	Phe	Lys	Glu	Ala	Val	Glu	Asn	Glu	Val	Gly	Asp	Pro
65					70				75					80	
Thr	Ala	Val	Thr	Val	Ala	Thr	Val	Asp	Asp	Asn	Gly	Gln	Pro	Asp	Ala
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<210> 995

<211> 924

<212> DNA

<213> Homo sapiens

<400> 995

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 180
 gcagagagcg aggacggtgt gtctgccagc gcctttgact tcaactgtctc caactttgtg
 240
 gacaacctgt atggctaccc ggaaggcaag gatgtgcttc gggagaccat caagtttatg
 300
 tacacagact gggccgaccg ggacaatggc gaaatgcgcc gcaaaaccct gctggcgctc
 360
 ttactgacc accaatgggt ggcaccagct gtggccactg ccaagctgca cgccgactac
 420

cagtctcccg tctactttta caccttctac caccactgcc aggcggaggg ccggcctgag
 480
 tgggcagatg cggcgacagg ggatgaactg ccctatgtct ttggcgtgcc catggtgggt
 540
 gccaccgacc tcttccctg taactttctcc aagaatgacg tcatgctcag tgccgtggtc
 600
 atgacctact ggaccaactt cgccaagact ggggaccca accagccggt gccgcaggat
 660
 accaagtcca tccacaccaa gcccaatcgc ttcgaggagg tgggtgtggag caaattcaac
 720
 agcaaggaga agcagtatct gcacataggc ctgaagccac gctgctga caactaccgc
 780
 gccacaagg tggccttctg gctggagctc gtgccccacc tgcaaacct gcacacggag
 840
 ctcttcacca ccaccacgg cctgcctccc tacgccacgc gctggccgcc tcgtccccc
 900
 gctggcgccc cgggcacacg ccgg
 924

<210> 996

<211> 308

<212> PRT

<213> Homo sapiens

<400> 996

Arg	Glu	Leu	Val	Asp	Gln	Asp	Val	Gln	Pro	Ala	Arg	Tyr	His	Ile	Ala
1				5				10						15	
Phe	Gly	Pro	Val	Val	Asp	Gly	Asp	Val	Val	Pro	Asp	Asp	Pro	Glu	Ile
			20					25					30		
Leu	Met	Gln	Gln	Gly	Glu	Phe	Leu	Asn	Tyr	Asp	Met	Leu	Ile	Gly	Val
		35					40					45			
Asn	Gln	Gly	Glu	Gly	Leu	Lys	Phe	Val	Glu	Asp	Ser	Ala	Glu	Ser	Glu
	50					55					60				
Asp	Gly	Val	Ser	Ala	Ser	Ala	Phe	Asp	Phe	Thr	Val	Ser	Asn	Phe	Val
65				70					75					80	
Asp	Asn	Leu	Tyr	Gly	Tyr	Pro	Glu	Gly	Lys	Asp	Val	Leu	Arg	Glu	Thr
			85					90						95	
Ile	Lys	Phe	Met	Tyr	Thr	Asp	Trp	Ala	Asp	Arg	Asp	Asn	Gly	Glu	Met
			100					105					110		
Arg	Arg	Lys	Thr	Leu	Leu	Ala	Leu	Phe	Thr	Asp	His	Gln	Trp	Val	Ala
		115					120					125			
Pro	Ala	Val	Ala	Thr	Ala	Lys	Leu	His	Ala	Asp	Tyr	Gln	Ser	Pro	Val
	130					135					140				
Tyr	Phe	Tyr	Thr	Phe	Tyr	His	His	Cys	Gln	Ala	Glu	Gly	Arg	Pro	Glu
145				150					155					160	
Trp	Ala	Asp	Ala	Ala	His	Gly	Asp	Glu	Leu	Pro	Tyr	Val	Phe	Gly	Val
			165					170					175		
Pro	Met	Val	Gly	Ala	Thr	Asp	Leu	Phe	Pro	Cys	Asn	Phe	Ser	Lys	Asn
		180					185					190			
Asp	Val	Met	Leu	Ser	Ala	Val	Val	Met	Thr	Tyr	Trp	Thr	Asn	Phe	Ala
	195					200					205				
Lys	Thr	Gly	Asp	Pro	Asn	Gln	Pro	Val	Pro	Gln	Asp	Thr	Lys	Phe	Ile
	210				215					220					
His	Thr	Lys	Pro	Asn	Arg	Phe	Glu	Glu	Val	Val	Trp	Ser	Lys	Phe	Asn

<212> DNA

<213> Homo sapiens

<400> 999

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acgcgttcag gcggttaaca atcgcgctaa gaagctgacc aaggaaaatg tcggcatggg
60
acatctgagc aagagcttca tcggtgttta tctctactca gaaggcaagt ttgtgaccag
120
caactatctc aatcgtggct acaaggacat tctgagctat gcagacgatg ctagtctttt
180
gcaaaagcct ccagcagtgg cttcagatga tctggataca ggtctcttga agagggcctt
240
ggatgagtgg gtggctgatg ctaagaacca cattctcaat actgaaaact tcttttagcgg
300
gtcaaccggg ctcaacattg acagtttcta cgtctttggg gaccaagaca tctgctggca
360
gttggcagct attctgaagc agagcatgaa tcgggaattg t
401

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<210> 1000

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1000

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Met Val His Leu Ser Lys Ser Phe Ile Gly Val Tyr Leu Tyr Ser Glu
 1             5             10             15
Gly Lys Phe Val Thr Ser Asn Tyr Leu Asn Arg Gly Tyr Lys Asp Ile
      20             25             30
Leu Ser Tyr Ala Asp Asp Ala Ser Leu Leu Gln Lys Pro Pro Ala Val
      35             40             45
Ala Ser Asp Asp Leu Asp Thr Gly Leu Leu Lys Arg Ala Leu Asp Glu
      50             55             60
Trp Val Ala Asp Ala Lys Asn His Ile Leu Asn Thr Glu Asn Phe Phe
      65             70             75             80
Ser Gly Ser Thr Gly Leu Asn Ile Asp Ser Phe Tyr Val Phe Gly Asp
      85             90             95
Gln Asp Ile Cys Trp Gln Leu Ala Ala Ile Leu Lys Gln Ser Met Asn
      100            105            110
Arg Glu Leu
      115

```

<210> 1001

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1001

```

cgcggtattg caatgcgcct ggtgccgaat gctaaacctg ctcttgattg cccggtactg
60
ttcccttatg ccctaatgc ggtgattgtt ggcttcctgg ccactaccgt tggttcaatt
120
atcggtatga ttgtcttccc gctgtttggg ctggcgatga tccttcggg tctgctaact
180

```

aactttcttcg ctggtgggtgc cgctggagtc tttggcaacg cgatgggagg acgtaaaggg
 240
 gcaattattg gcggcgtagt gcacgggctg tttatcaccc tgttaccagc gatgctaatac
 300
 cccttactgg aaaccttcgg cttcaaaggc gtcaccttca gtgattccga t
 351

<210> 1002

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1002

Arg	Gly	Ile	Ala	Met	Arg	Leu	Val	Pro	Asn	Ala	Lys	Pro	Ala	Leu	Asp
1				5				10						15	
Cys	Pro	Val	Leu	Phe	Pro	Tyr	Ala	Pro	Asn	Ala	Val	Ile	Val	Gly	Phe
		20						25					30		
Leu	Ala	Thr	Thr	Val	Gly	Ser	Ile	Ile	Gly	Met	Ile	Val	Phe	Pro	Leu
		35				40						45			
Phe	Gly	Leu	Ala	Met	Ile	Leu	Pro	Gly	Leu	Leu	Thr	Asn	Phe	Phe	Ala
	50				55						60				
Gly	Gly	Ala	Ala	Gly	Val	Phe	Gly	Asn	Ala	Met	Gly	Gly	Arg	Lys	Gly
65					70				75					80	
Ala	Ile	Ile	Gly	Gly	Val	Val	His	Gly	Leu	Phe	Ile	Thr	Leu	Leu	Pro
				85				90						95	
Ala	Met	Leu	Ile	Pro	Leu	Leu	Glu	Thr	Phe	Gly	Phe	Lys	Gly	Val	Thr
		100						105						110	
Phe	Ser	Asp	Ser	Asp											
		115													

<210> 1003

<211> 444

<212> DNA

<213> Homo sapiens

<400> 1003

acgcgtcctc ctttagtcga tcgcgaatat gataggcgaa gcgacgtgat ggtgtgacgc
 60
 acgagcactg ccccatctcc taggcttagg gttatgcaga ctcccatcga cgctacctcc
 120
 acccccgcat ggggcacact ctccggccta aagtcctcgt tcgctgacgg gccacataaa
 180
 ctgcgcggtt tgttcgacgc cgaccctcac cgcgctgagc gctacacctt tgacgtcgcg
 240
 gattttgcacg tcgatttata gaagaacctc cttaccgacg agattcgtga cgctctcttc
 300
 gaactggctg cgcagatgcg cgtcaccgag cgctcgtgac cgatgtatgc cggtgagcac
 360
 atcaacgtca ccgaggaccg cgccgtcctc cataccgcgc tgtgtcgtcc ccgactgac
 420
 gagctgcatg ttgacgggtca ggat
 444

<210> 1004

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1004
 Met Gln Thr Pro Ile Asp Ala Thr Ser Thr Pro Ala Trp Gly Thr Leu
 1 5 10 15
 Ser Gly Leu Lys Ser Arg Phe Ala Asp Gly Pro His Lys Leu Arg Arg
 20 25 30
 Leu Phe Asp Ala Asp Pro His Arg Ala Glu Arg Tyr Thr Phe Asp Val
 35 40 45
 Ala Asp Leu His Val Asp Leu Ser Lys Asn Leu Leu Thr Asp Glu Ile
 50 55 60
 Arg Asp Ala Leu Leu Glu Leu Ala Ala Gln Met Arg Val Thr Glu Arg
 65 70 75 80
 Arg Asp Ala Met Tyr Ala Gly Glu His Ile Asn Val Thr Glu Asp Arg
 85 90 95
 Ala Val Leu His Thr Ala Leu Cys Arg Pro Arg Thr Asp Glu Leu His
 100 105 110
 Val Asp Gly Gln Asp
 115

<210> 1005
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 1005
 ccattggccat tcctctgggtg actgcatcca gtccgatgga tttaaacacc cccaatgtgc
 60
 tgggtgactcc caagttttaca cctccagcca gggcttctct cctggggtttg catacccacc
 120
 tatctatctg ccttagccac tcgtgtctga cgagcacctc acacctccag aggtcctca
 180
 tttcttccca tgctgtcttc toccacactc ctccctctca catgagggca acttcactct
 240
 ccagttgct caggccccaa acctccatca gttttgactc ttctctcgca cactactcg
 299

<210> 1006
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1006
 Met Ala Ile Pro Leu Val Thr Ala Ser Ser Pro Met Asp Leu Asn Thr
 1 5 10 15
 Pro Asn Val Leu Val Thr Pro Lys Phe Thr Pro Pro Ala Arg Ala Ser
 20 25 30
 Leu Leu Gly Leu His Thr His Leu Ser Ile Cys Leu Ser His Ser Cys
 35 40 45
 Leu Thr Ser Thr Ser His Leu Gln Arg Leu Leu Ile Ser Ser His Ala
 50 55 60
 Cys Phe Ser His Thr Pro Pro Ser His Met Arg Ala Thr Ser Ser Ser

65 70 75 80
Gln Leu Leu Arg Pro Gln Thr Ser Ile Ser Phe Asp Ser Ser Leu Ala
 85 90 95
His Tyr Ser

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<210> 1007
<211> 389
<212> DNA
<213> Homo sapiens
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<400> 1007
gccggcgcgga agatctaaag agctggaaag gcaaccgcaa gagagcgggg ttcttgcttg
60
atgagcgcgcg tttcatggac tccatcttcg gcccgggggc tgggtgtgacg gtctctgaaa
120
tcaacgacgc caccgaggca ccagaggtg tgacgttgag tgatggccga cgacagggca
180
acgccggagc aatcggtgac ttcttcgcat cgaaggacta caagccgtcc gcggcgagcc
240
tccgaggtcc ggcgagggat ccgaaatgga tcgacgttca acgctcattc cacgagaacg
300
aagaaggccc gtacagctgg tacacctggc gcgggcaggg ttttgacacg ggcgctggat
360
ggcgtaaata cgtccatgcc gcgacaacg
389
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<210> 1008
<211> 105
<212> PRT
<213> Homo sapiens
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```

<400> 1008
Met Asp Ser Ile Phe Gly Pro Gly Pro Gly Val Thr Val Ser Glu Ile.
  1             5             10             15
Asn Asp Ala Thr Glu Ala Pro Arg Gly Val Thr Leu Ser Asp Gly Arg
      20             25             30
Arg Gln Gly Asn Ala Gly Ala Ile Gly Asp Phe Phe Ala Ser Lys Asp
      35             40             45
Tyr Lys Pro Ser Ala Ala Ser Leu Arg Gly Pro Ala Arg Asp Pro Lys
      50             55             60
Trp Ile Asp Val Gln Arg Ser Phe His Glu Asn Glu Glu Gly Pro Tyr
65      70             75             80
Ser Trp Tyr Thr Trp Arg Gly Gln Ala Phe Asp Thr Gly Ala Gly Trp
      85             90             95
Arg Lys Tyr Val His Ala Ala Thr Thr
      100             105

```

```
<210> 1009
<211> 324
<212> DNA
<213> Homo sapiens
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<400> 1009

ngccttcattg gctgntatgc ctggcctcat ccccatccct ggcacccgtg acgatagcca
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 cattccactg gtgtttcccc aggaaagcca accctacctg catctcagca gagcttccac
 120
 ggagttggaa ccccgctccg agaggggtgtg ggctcagggg ccaggggtca cacaaactcc
 180
 agaaggagga cgtagttggt ttgcaaggct gtcctttgcc ctggttgaat aaccttcggt
 240
 ctgccccgag aggaacgtgg gcattagget gcacccgcag gaagccatgt attttctgag
 300
 aaacttgccc catggtgcag atct
 324

<210> 1010

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1010

Met	Gly	Gln	Val	Ser	Gln	Lys	Ile	His	Gly	Phe	Leu	Arg	Val	Gln	Pro
1				5					10					15	
Asn	Ala	His	Val	Pro	Leu	Gly	Ala	Asp	Arg	Arg	Leu	Phe	Asn	Gln	Gly
			20					25					30		
Lys	Gly	Gln	Pro	Cys	Lys	Pro	Thr	Thr	Ser	Ser	Phe	Trp	Ser	Leu	Cys
		35					40				45				
Asp	Pro	Trp	Pro	Leu	Ser	Pro	His	Pro	Leu	Gly	Ala	Gly	Phe	Gln	Leu
	50					55					60				
Arg	Gly	Ser	Ser	Ala	Glu	Met	Gln	Val	Gly	Leu	Ala	Phe	Leu	Gly	Lys
65					70				75					80	
His	Gln	Trp	Asn	Val	Ala	Ile	Val	Thr	Gly	Ala	Arg	Asp	Gly	Asp	Glu
			85					90					95		
Ala	Arg	His	Xaa	Ser	His	Glu	Gly								
			100												

<210> 1011

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1011

ctgcagaaaa ggaggggggtt cccatgccaa ggcagaactg tctgggacag acgctgcccc
 60
 gatccctgcg gctgcctgca ctctggacca cgagctctga gagcagcagg ttgagggccg
 120
 gtgggcagca gctcggaggc tccgcgaggt gcaggagacg caggcatggc cggtagagctg
 180
 actcctgagg aggaggccca gtacaaaaag gctttctccg cggttgacac ggatggaaac
 240
 ggcaccatca atgcccagga gctgggocgc gcgctgaagg ccacgggcaa gaacctctcg
 300
 gaggccacgc taaagaaact catctccgag
 330

<210> 1012

<211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1012
 Met Ala Gly Glu Leu Thr Pro Glu Glu Glu Ala Gln Tyr Lys Lys Ala
 1 5 10 15
 Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln Glu
 20 25 30
 Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala Gln
 35 40 45
 Leu Lys Lys Leu Ile Ser Glu
 50 55

<210> 1013
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1013
 nacttgcaca tcgtggtggc gtcgctgcgt gcggcactga caatgtgact ggcgcattcg
 60
 tggcggcgctc tcctcgctcg cgggagcggc gaggaaggat taacgatgac cagcgacgctc
 120
 cccgggattg gtcgaacgc cgccactttg gcgcgttccc aggctcgcag tgacaaggtc
 180
 gaggctgatt tggcgggtcca tcccgacaag tggcgcattc tgggggggga cgcctctact
 240
 ggcagcctgc acatcggtca ctacttcggg tcgctggcga atcgggtacg cgtgcagAAC
 300
 aagggcattg agtctttcct tgcgctcgct gactaccagg ttatctatga ccgcgggggg
 360
 ggtggtgacc tgcaggccaa tggtatgtcg aatgtcgccg attacctggc aatcggcatt
 420
 gacccaacgc gt
 432

<210> 1014
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1014
 Met Thr Ser Asp Val Pro Gly Ile Gly Ser Asn Ala Ala Thr Leu Ala
 1 5 10 15
 Arg Ser Gln Ala Arg Ser Asp Lys Val Glu Ala Asp Leu Ala Val His
 20 25 30
 Pro Asp Lys Trp Arg Ile Leu Gly Gly Asp Arg Pro Thr Gly Ser Leu
 35 40 45
 His Ile Gly His Tyr Phe Gly Ser Leu Ala Asn Arg Val Arg Val Gln
 50 55 60
 Asn Lys Gly Ile Glu Ser Phe Leu Val Val Ala Asp Tyr Gln Val Ile
 65 70 75 80
 Tyr Asp Arg Gly Gly Gly Gly Asp Leu Gln Ala Asn Val Met Ser Asn

85 90 95
 Val Ala Asp Tyr Leu Ala Ile Gly Ile Asp Pro Thr Arg
 100 105

<210> 1015

<211> 467

<212> DNA

<213> Homo sapiens

<400> 1015

nngaattcga tggctgtgaa aggtcgagct cttaagtgtt ttcatatccc ctgtgtgggtt
 60
 gaaaacttcc cgatgaaagc ggcacagggtt gaagagctga aagaattgga aagagtttta
 120
 cagcaaaaga agattgaagc agagtgtctt aaactacgga aggaaattgt agaggctcag
 180
 tctggagtta agttgattaa acagcgtcat gaagaggatg atgaagaaga ggaagaggaa
 240
 gacaagacag taaaatatag caatttgccc aattacctgc ttggtagtct gagtactgat
 300
 tttggggtag atacctcttt attgtcaagc caattggagc ttcattccag agaagagaaa
 360
 atcaacccaaa ttatattatt gaaagatatc atttacaagg taaaaactgt tttcaataat
 420
 gagtttgacg ctgcatataa acaaaaagag tttgaaattg cacgcgt
 467

<210> 1016

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1016

Xaa Asn Ser Met Ala Val Lys Gly Arg Ala Leu Lys Cys Phe His Ile
 1 5 10 15
 Pro Cys Val Val Glu Asn Phe Pro Met Lys Ala Arg Thr Val Glu Glu
 20 25 30
 Leu Lys Glu Leu Glu Arg Val Leu Gln Gln Lys Lys Ile Glu Ala Glu
 35 40 45
 Cys Leu Lys Leu Arg Lys Glu Ile Val Glu Ala Gln Ser Gly Val Lys
 50 55 60
 Leu Ile Lys Gln Arg His Glu Glu Asp Asp Glu Glu Glu Glu Glu
 65 70 75 80
 Asp Lys Thr Val Lys Tyr Ser Asn Leu Pro Asn Tyr Leu Leu Gly Ser
 85 90 95
 Leu Ser Thr Asp Phe Gly Val Asp Thr Ser Leu Leu Ser Ser Gln Leu
 100 105 110
 Glu Leu His Ser Arg Glu Glu Lys Ile Asn Gln Ile Ile Leu Leu Lys
 115 120 125
 Asp Ile Ile Tyr Lys Val Lys Thr Val Phe Asn Asn Glu Phe Asp Ala
 130 135 140
 Ala Tyr Lys Gln Lys Glu Phe Glu Ile Ala Arg
 145 150 155

<210> 1017

<211> 335

<212> DNA

<213> Homo sapiens

<400> 1017

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acgcgtggct gggtgggtat gtggaaccat gtgcgcgcta atgagaagga tgcgaagggg
60
aacattaaag tgggtcgccc cggtactttt gcggagggtca tggatttcta tgcgcattat
120
ctgaaggggtg cggttacccg tttccgtccg aattttattg tgcaggataa tacgggccgt
180
tggcgtgttc agtcgtcgtg gccgcagccg aatcgactg ttacttttgc gggaccccg
240
ggcattgtcc gctacggtac gacgttggcg gccgcacgc atgggaatgg tcaggctatt
300
ccgcaggcgg atgcacagtc tcttaaccgc gagaa
335

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<210> 1018

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1018

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Met Trp Asn His Val Arg Ala Asn Glu Lys Asp Ala Lys Gly Asn Ile
 1           5           10          15
Lys Val Gly Arg Pro Gly Tyr Phe Ala Glu Val Met Asp Phe Tyr Ala
      20           25           30
His Tyr Leu Lys Gly Ala Val Thr Arg Phe Arg Pro Asn Phe Ile Val
      35           40           45
Gln Asp Asn Thr Gly Arg Trp Arg Val Gln Ser Ser Trp Pro Gln Pro
      50           55           60
Asn Arg Thr Val Thr Phe Ala Gly Pro Arg Gly Ile Val Arg Tyr Gly
65           70           75           80
Thr Thr Leu Ala Ala Arg Thr His Gly Asn Gly Gln Ala Ile Pro Gln
      85           90           95
Ala Asp Ala Gln Ser Leu Asn Arg Glu
      100          105

```

<210> 1019

<211> 454

<212> DNA

<213> Homo sapiens

<400> 1019

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acgcgtgaag gggtagtcgt agtagaagtc gtccacaaac acgggccccg gcagggtccag
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ctctggagcc tctectcaa tggcgttgcc catggtgcct ggcttgggtg atgaggcggg
120
tgaagggcgt ggggccaggt ggtgcgggat gaagtcagcc tcgttgaaga gtcgtgggt
180
ggaggagccg ctgcctgagc cttcagggcc cagtgtgccc agggggccacc gacagagtgg
240

```

cagagagcag gtgacttcct ggcactgcgg agcgaggacc cggagaagta cttcctcaat
 300
 ggtggctgga ccatccagtg gaacggggac taccaggtgg cagggaccac cttcacatac
 360
 gcacgcaggg gcaactggga gaacctcacg tccccgggtc ccaccaagga gcctgtctgg
 420
 atccagctgc tgttccagga gagcaaccct gggg
 454

<210> 1020

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1020

Met	Ala	Leu	Pro	Met	Val	Pro	Gly	Leu	Gly	Asp	Glu	Ala	Gly	Glu	Gly
1				5				10					15		
Arg	Gly	Ala	Arg	Trp	Cys	Gly	Met	Lys	Ser	Ala	Ser	Leu	Lys	Ser	Ser
			20					25				30			
Trp	Leu	Glu	Glu	Pro	Leu	Pro	Glu	Pro	Ser	Gly	Pro	Ser	Val	Pro	Arg
		35					40					45			
Gly	His	Arg	Gln	Ser	Gly	Arg	Glu	Gln	Val	Thr	Ser	Trp	His	Cys	Gly
	50					55					60				
Ala	Arg	Thr	Arg	Arg	Ser	Thr	Ser	Ser	Met	Val	Ala	Gly	Pro	Ser	Ser
65					70					75				80	
Gly	Thr	Gly	Thr	Thr	Arg	Trp	Gln	Gly	Pro	Pro	Ser	His	Thr	His	Ala
			85					90					95		
Gly	Ala	Thr	Gly	Arg	Thr	Ser	Arg	Pro	Arg	Val	Pro	Pro	Arg	Ser	Leu
			100					105					110		
Ser	Gly	Ser	Ser	Cys	Cys	Ser	Arg	Arg	Ala	Thr	Leu	Gly			
			115				120					125			

<210> 1021

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1021

cagctgtgtc gtgacctcct gtagaccaga gagaggtaga gcatgaaaaa tgctcattga
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 gccgagatta tctgacagga ccaaagcata taaagttgac tgaagcagga gcaaacacgc
 120
 tggttgaggg tcaagtgtg gggcagcagc aacaacaaac caaaaaaag ccctttgaac
 180
 tcccttaatg ttgcccagag gttctggtag agaacaagtc acatgcctaa gaaggtcttt
 240
 taaagggcac tcttgagtt tcagcatttg gtccggggaa ttgcacaagg ctctgcttaa
 300
 atgcagagct ctttctagca tcttcatatt caaggcggaa aaactgagct tggcgaggaa
 360
 ccctgt
 366

<210> 1022

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1022
 Met Lys Met Leu Glu Arg Ala Leu His Leu Ser Arg Ala Leu Cys Asn
 1 5 10 15
 Ser Pro Asp Gln Met Leu Lys Leu Gln Glu Cys Pro Leu Lys Asp Leu
 20 25 30
 Leu Arg His Val Thr Cys Ser Leu Pro Glu Pro Leu Gly Asn Ile Lys
 35 40 45
 Gly Val Gln Arg Ala Phe Phe Trp Phe Val Val Ala Ala Ala Pro Ala
 50 55 60
 Leu Asp Pro Gln Pro Ala Cys Leu Leu Leu Leu Gln Ser Thr Leu Tyr
 65 70 75 80
 Ala Leu Val Leu Ser Asp Asn Leu Gly Ser Met Ser Ile Phe His Ala
 85 90 95
 Leu Pro Leu Ser Gly Leu Gln Glu Val Thr Thr Gln Leu
 100 105

<210> 1023
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1023
 gccgggcttc gggctctctga agcgatcaac ctggccgact cggatgcaga tctggacggc
 60
 ggcatacctga ccatacagca gaccaagttt ggcaagtccc gcatgggtgcc gctacacccc
 120
 agcgtgatcg gtccgatggc agcctaccgg gccttgcgcc gccagtacgt gcctgcgaag
 180
 ccgcagatga cattcttcgt gggctcgcgt ggcgtgcacc ggggtgaacc gctgggagat
 240
 aggcaggtgc atcgagtgtt ctgtcagctg cgcgagcaat tgggttggtat cgatcgcggc
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 420
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<210> 1024
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1024
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 20 25 30
 Ser Arg Met Val Pro Leu His Pro Ser Val Ile Gly Pro Met Ala Ala

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      35          40          45
Tyr Arg Ala Leu Arg Arg Gln Tyr Val Pro Ala Lys Pro Gln Met Thr
  50          55          60
Phe Phe Val Gly Ser Arg Gly Val His Arg Gly Glu Pro Leu Gly Asp
  65          70          75          80
Arg Gln Val His Arg Val Phe Cys Gln Leu Arg Glu Gln Leu Gly Trp
      85          90          95
Ile Asp Arg Gly Gly His Gly Arg Pro Arg Val His Asp Leu Arg His
      100          105          110
Ser Phe Ala Val Arg Arg Met Ile Leu Trp His Gln Gln Gly Ala Asn
      115          120          125
Leu Asp Gln Arg Met Leu Ala Leu Ser Thr Tyr Met Gly His
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<210> 1025
 <211> 518
 <212> DNA
 <213> Homo sapiens

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  120
gatagcggcg ctgcgtacgc gatgatggat gagccgtggt gggaagggcg cgtcgccctcg
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  240
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cagctctgcc ctgcagcccg gcacctggcc gtctacctgc tggaccactt catggatcgc
  360
tacaacgtca ccacctccaa gcagctctac accgtggccg tctcctgcct cctgcttgca
  420
agtaagtctg aggatcggga agaccacgtc cccaagttgg agcaaataaa cagcacgagg
  480
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<210> 1026
 <211> 125
 <212> PRT
 <213> Homo sapiens

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<400> 1026
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Cys Thr Leu Arg Glu Lys Glu Leu Lys Leu Pro Thr Phe Arg Ala His
      20          25          30
Ser Pro Leu Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu
      35          40          45
Leu Ser Ser His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val
      50          55          60
Tyr Leu Leu Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys

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65		70		75		80									
Gln	Leu	Tyr	Thr	Val	Ala	Val	Ser	Cys	Leu	Leu	Ala	Ser	Lys	Phe	
				85					90				95		
Glu	Asp	Arg	Glu	Asp	His	Val	Pro	Lys	Leu	Glu	Gln	Ile	Asn	Ser	Thr
			100					105					110		
Arg	Ile	Leu	Ser	Ser	Gln	Asn	Phe	Thr	Leu	Thr	Lys	Lys			
		115					120						125		

<210> 1027

<211> 465

<212> DNA

<213> Homo sapiens

<400> 1027

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atcctgcagc agctgccgct gctcaaggcc atgcgggaaa agccagccgg aggcattcct
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<210> 1028

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1028

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Asn	Ala	Thr	Ser	Ile	Leu	Gln	Gln	Leu	Pro	Leu	Leu	Lys	Ala	Met	Arg
			20					25					30		
Glu	Lys	Pro	Ala	Gly	Gly	Ile	Pro	Val	Leu	Gly	Ser	Leu	Val	Asn	Thr
		35				40						45			
Xaa	Pro	Glu	Ala	His	His	Xaa	Trp	Leu	Lys	Val	Ile	Thr	Ala	Asn	Ile
	50					55					60				
Leu	Gln	Leu	Gln	Val	Lys	Pro	Ser	Ala	Asn	Asp	Gln	Glu	Leu	Leu	Val
65				70					75					80	
Lys	Ile	Pro	Leu	Asp	Met	Val	Ala	Gly	Phe	Asn	Thr	Pro	Leu	Val	Lys
			85					90					95		
Thr	Ile	Val	Glu	Phe	His	Met	Thr	Thr	Glu	Ala	Gln	Ala	Thr	Ile	Arg
		100					105						110		
Met	Asp	Thr	Ser	Ala	Ser	Gly	Pro	Thr	Arg	Leu	Val	Leu	Ser	Asp	Cys
		115				120						125			
Ala	Thr	Ser	His	Gly	Ser	Leu	Arg	Ile	Gln	Leu	Leu	His	Lys	Leu	Ser

130 135 140
 Phe Lys Leu Asn Ala Ser Ala Lys Gln Val Met
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<210> 1029
 <211> 479
 <212> DNA
 <213> Homo sapiens

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 tattactaac caagtgagga aaattatccc tagcagggtcc agatgaccgt gtgcatgaat
 180
 cacagggaga ccctaaagga tttcctcctg taaagctctt tccccaccta tttgctactg
 240
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 300
 aatgtaaatg ctctaggaaa aggcaactca tctcttaaata tctctccaag gttcaaatcc
 360
 tttccaaaga ggaggctttt gtataagtca gaaggcccag tcctgaagg tcatggaaaa
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 479

<210> 1030
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1030
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 Leu Trp His Glu Arg Phe Cys Phe Leu Leu Lys Gln Phe Gln Ala Val
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 Ala Asn Arg Trp Gly Lys Ser Phe Thr Gly Gly Asn Pro Leu Gly Ser
 35 40 45
 Pro Cys Asp Ser Cys Thr Arg Ser Ser Gly Pro Ala Arg Asp Asn Phe
 50 55 60
 Pro His Leu Val Ser Asn Asn Asn Asn Tyr Thr Leu Met Ser Ser
 65 70 75 80
 Cys Ser Ala Arg His Leu Trp Pro Val Leu Gly Arg Gln Tyr Leu Phe
 85 90 95
 Glu Pro Ser His Ser Ser Val Arg Thr Val Ser Leu His Ala
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<210> 1031
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 1031

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 120
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 180
 ggggtggagcg tcgtcgtcga cccgctcgcc tatcaatggc gacaccctaa ctggcaaggc
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 322

<210> 1032

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1032

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Met	Leu	Pro	Gln	Ala	Asp	Gly	Trp	Phe	Glu	Val	Glu	Val	Lys	Cys	Pro
			20					25					30		
Ala	Gly	Thr	His	Tyr	Arg	Tyr	Asn	Ile	Asp	Gly	Glu	Thr	Asp	Val	Pro
		35					40					45			
Asp	Pro	Ala	Ser	Arg	Ala	Gln	Ala	Asn	Asp	Val	His	Gly	Trp	Ser	Val
	50					55					60				
Val	Val	Asp	Pro	Leu	Ala	Tyr	Gln	Trp	Arg	His	Pro	Asn	Trp	Gln	Gly
65				70					75					80	
Arg	Pro	Trp	His	Glu	Ala	Val	Ile	Tyr	Glu	Leu	His	Val	Gly	Val	Leu
			85						90					95	
Gly	Gly	Tyr	Ala	Ala	Val	Glu	Gln	Gln	Leu	Pro					
			100						105						

<210> 1033

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1033

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 120
 aattcacatt caaatccatc acttttcaca taattgctgt taatatgaac gtcattgagtc
 180
 gttgttgcgc gcggttgcca gtgggaactcc ccatacacgg cagcgagaca tggaggaacc
 240
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 420

aaagccgatac gaggaatctt tttctgcggc accgggatgg gcatggccat cacggccaac
 480
 aaggtgccag gcattcgcgc ctgcaccgcc caccactcct tctccgtaga gcgggtcatc
 540
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<210> 1034
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1034
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 Lys Asp Val Val Lys Ala Asp Leu Glu Ala Asp Ser Arg Val Asp Asp
 20 25 30
 Val Ile Asp Val Gly Val Gln Ala Gly Asp Asp Thr Leu Tyr Pro Arg
 35 40 45
 Ile Gly Ile Lys Gly Ala His Val Ile Lys Asp Gly Lys Ala Asp Arg
 50 55 60
 Gly Ile Phe Phe Cys Gly Thr Gly Met Gly Met Ala Ile Thr Ala Asn
 65 70 75 80
 Lys Val Pro Gly Ile Arg Ala Cys Thr Ala His Asp Ser Phe Ser Val
 85 90 95
 Glu Arg Leu Ile Met Ser Asn Asp Ala His Val Leu Cys Leu Gly Gln
 100 105 110
 Arg

<210> 1035
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1035
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 120
 atatgtnaat gtctgtgtgc atgtacgnga atgtgcgcgt gtatggaatg tatctgtgta
 180
 tgtgtatgga ccgtttgtgt gattatgcaa tatgtccgtg tgtgcgtatg gagtgtctca
 240
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 300
 atagaaagcg tctgcgctgt gtgcatgtgt gtcagtatcg aacgagtcgg agatgtggta
 360
 atn
 363

<210> 1036
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1036

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Xaa Ala Cys Asn Val Cys Val Cys Met Xaa Pro Cys Leu Cys Val Cys
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Met Xaa Ile Cys Val Cys Ile Xaa Met Cys Val Cys Val Xaa Glu Cys
      20           25           30
Val Cys Val Xaa Glu Ala Val Cys Ile Cys Xaa Cys Leu Cys Ala Cys
      35           40           45
Thr Xaa Met Cys Ala Cys Met Glu Cys Ile Cys Val Cys Val Trp Thr
      50           55           60
Val Cys Val Ile Met Gln Tyr Val Arg Val Cys Val Trp Ser Val Ser
65           70           75           80
Val Trp His Val Cys Val Tyr Leu Leu Cys Val Ser Val Cys Val Xaa
      85           90           95
Thr Cys Ile Cys Ile Glu Ser Val Cys Ala Val Cys Met Cys Val Ser
      100          105          110
Ile Glu Arg Val Gly Asp Val Val Xaa
      115          120

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<210> 1037

<211> 5832

<212> DNA

<213> Homo sapiens

<400> 1037

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120
gcgtatagtg gggtgcccag tgcaagctac agcggcccag ggcccgggtat gggatatcagt
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720
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780
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840

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 5700

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 5832

<210> 1038
 <211> 1485
 <212> PRT
 <213> Homo sapiens

<400> 1038
 Pro Ser Pro Gly Gly Gln Met His Ala Gly Ile Ser Ser Phe Gln Gln
 1 5 10 15
 Ser Asn Ser Ser Gly Thr Tyr Gly Pro Gln Met Ser Gln Tyr Gly Pro
 20 25 30
 Gln Gly Asn Tyr Ser Arg Pro Pro Ala Tyr Ser Gly Val Pro Ser Ala
 35 40 45
 Ser Tyr Ser Gly Pro Gly Pro Gly Met Gly Ile Ser Ala Asn Asn Gln
 50 55 60
 Met His Gly Gln Gly Pro Ser Gln Pro Cys Gly Ala Val Pro Leu Gly
 65 70 75 80
 Arg Met Pro Ser Ala Gly Met Gln Asn Arg Pro Phe Pro Gly Asn Met
 85 90 95
 Ser Ser Met Thr Pro Ser Ser Pro Gly Met Ser Gln Gln Gly Gly Pro
 100 105 110
 Gly Met Gly Pro Pro Met Pro Thr Val Asn Arg Lys Ala Gln Glu Ala
 115 120 125
 Ala Ala Ala Val Met Gln Ala Ala Ala Asn Ser Ala Gln Ser Arg Gln
 130 135 140
 Gly Ser Phe Pro Gly Met Asn Gln Ser Gly Leu Met Ala Ser Ser Ser
 145 150 155 160
 Pro Tyr Ser Gln Pro Met Asn Asn Ser Ser Ser Leu Met Asn Thr Gln
 165 170 175
 Ala Pro Pro Tyr Ser Met Ala Pro Ala Met Val Asn Ser Ser Ala Ala
 180 185 190
 Ser Val Gly Leu Ala Asp Met Met Ser Pro Gly Glu Ser Lys Leu Pro
 195 200 205
 Leu Pro Leu Lys Ala Asp Gly Lys Glu Glu Gly Thr Pro Gln Pro Glu
 210 215 220
 Ser Lys Ser Lys Asp Ser Tyr Ser Ser Gln Gly Ile Ser Gln Pro Pro
 225 230 235 240
 Thr Pro Gly Asn Leu Pro Val Pro Ser Pro Met Ser Pro Ser Ser Ala
 245 250 255
 Ser Ile Ser Ser Phe His Gly Asp Glu Ser Asp Ser Ile Ser Ser Pro
 260 265 270
 Gly Trp Pro Lys Thr Pro Ser Ser Pro Lys Ser Ser Ser Ser Thr Thr
 275 280 285
 Thr Gly Glu Lys Ile Thr Lys Val Tyr Glu Leu Gly Asn Glu Pro Glu
 290 295 300
 Arg Lys Leu Trp Val Asp Arg Tyr Leu Thr Phe Met Glu Glu Arg Gly
 305 310 315 320
 Ser Pro Val Ser Ser Leu Pro Ala Val Gly Lys Lys Pro Leu Asp Leu

															325								330								335			
Phe	Arg	Leu	Tyr	Val	Cys	Val	Lys	Glu	Ile	Gly	Gly	Leu	Ala	Gln	Val																			
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Asn	Lys	Asn	Lys	Lys	Trp	Arg	Glu	Leu	Ala	Thr	Asn	Leu	Asn	Val	Gly																			
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Thr	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Leu	Lys	Lys	Gln	Tyr	Ile	Gln	Tyr																			
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Leu	Phe	Ala	Phe	Glu	Cys	Lys	Ile	Glu	Arg	Gly	Glu	Glu	Pro	Pro	Pro																			
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Glu	Val	Phe	Ser	Thr	Gly	Asp	Thr	Lys	Lys	Gln	Pro	Lys	Leu	Gln	Pro																			
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Pro	Ser	Pro	Ala	Asn	Ser	Gly	Ser	Leu	Gln	Gly	Pro	Gln	Thr	Pro	Gln																			
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Ser	Thr	Gly	Ser	Asn	Ser	Met	Ala	Glu	Val	Pro	Gly	Asp	Leu	Lys	Pro																			
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Pro	Thr	Pro	Ala	Ser	Thr	Pro	His	Gly	Gln	Met	Thr	Pro	Met	Gln	Gly																			
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Gly	Arg	Ser	Ser	Thr	Ile	Ser	Val	His	Asp	Pro	Phe	Ser	Asp	Val	Ser																			
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Asp	Ser	Ser	Phe	Pro	Lys	Arg	Asn	Ser	Met	Thr	Pro	Asn	Ala	Pro	Tyr																			
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Gln	Gln	Gly	Met	Ser	Met	Pro	Asp	Val	Met	Gly	Arg	Met	Pro	Tyr	Glu																			
															500								505								510			
Pro	Asn	Lys	Asp	Pro	Phe	Gly	Gly	Met	Arg	Lys	Val	Pro	Gly	Ser	Ser																			
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Glu	Pro	Phe	Met	Thr	Gln	Gly	Gln	Met	Pro	Asn	Ser	Ser	Met	Gln	Asp																			
															530								535								540			
Met	Tyr	Asn	Gln	Ser	Pro	Ser	Gly	Ala	Met	Ser	Asn	Leu	Gly	Met	Gly																			
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Gln	Arg	Gln	Gln	Phe	Pro	Tyr	Gly	Ala	Ser	Tyr	Asp	Arg	Arg	His	Glu																			
															565								570								575			
Pro	Tyr	Gly	Gln	Gln	Tyr	Pro	Gly	Gln	Gly	Pro	Pro	Ser	Gly	Gln	Pro																			
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Pro	Tyr	Gly	Gly	His	Gln	Pro	Gly	Leu	Tyr	Pro	Gln	Gln	Pro	Asn	Tyr																			
															595								600								605			
Lys	Arg	His	Met	Asp	Gly	Met	Tyr	Gly	Pro	Pro	Ala	Lys	Arg	His	Glu																			
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Gly	Asp	Met	Tyr	Asn	Met	Gln	Tyr	Ser	Ser	Gln	Gln	Gln	Glu	Met	Tyr																			
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Asn	Gln	Tyr	Gly	Gly	Ser	Tyr	Ser	Gly	Pro	Asp	Arg	Arg	Pro	Ile	Gln																			
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Gly	Gln	Tyr	Pro	Tyr	Pro	Tyr	Ser	Arg	Glu	Arg	Met	Gln	Gly	Pro	Gly																			
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Gln	Ile	Gln	Thr	His	Gly	Ile	Pro	Leu	Gln	Met	Met	Gly	Gly	Pro	Leu																			
															675								680								685			
Gln	Ser	Ser	Ser	Ser	Glu	Gly	Pro	Gln	Gln	Asn	Met	Trp	Ala	Ala	Arg																			
															690								695								700			
Asn	Asp	Met	Pro	Tyr	Pro	Tyr	Gln	Asn	Arg	Gln	Gly	Pro	Gly	Gly	Pro																			
70																																		

755					760					765					
Thr	Arg	Pro	Pro	Gln	Pro	Ser	Tyr	Gln	Thr	Pro	Pro	Ser	Leu	Pro	Asn
770					775					780					
His	Ile	Ser	Arg	Ala	Pro	Ser	Pro	Ala	Ser	Phe	Gln	Arg	Ser	Leu	Glu
785					790					795					
Asn	Arg	Met	Ser	Pro	Ser	Lys	Ser	Pro	Phe	Leu	Pro	Ser	Met	Lys	Met
805					810					815					
Gln	Lys	Val	Met	Pro	Thr	Val	Pro	Thr	Ser	Gln	Val	Thr	Gly	Pro	Pro
820					825					830					
Pro	Gln	Pro	Pro	Pro	Ile	Arg	Arg	Glu	Ile	Thr	Phe	Pro	Pro	Gly	Ser
835					840					845					
Val	Glu	Ala	Ser	Gln	Pro	Val	Leu	Lys	Gln	Arg	Arg	Lys	Ile	Thr	Ser
850					855					860					
Lys	Asp	Ile	Val	Thr	Pro	Glu	Ala	Trp	Arg	Val	Met	Met	Ser	Leu	Lys
865					870					875					
Ser	Gly	Leu	Leu	Ala	Glu	Ser	Thr	Trp	Ala	Leu	Asp	Thr	Ile	Asn	Ile
885					890					895					
Leu	Leu	Tyr	Asp	Asp	Ser	Thr	Val	Ala	Thr	Phe	Asn	Leu	Ser	Gln	Leu
900					905					910					
Ser	Gly	Phe	Leu	Glu	Leu	Leu	Val	Glu	Tyr	Phe	Arg	Lys	Cys	Leu	Ile
915					920					925					
Asp	Ile	Phe	Gly	Ile	Leu	Met	Glu	Tyr	Glu	Val	Gly	Asp	Pro	Ser	Gln
930					935					940					
Lys	Ala	Leu	Asp	His	Asn	Ala	Ala	Arg	Lys	Asp	Asp	Ser	Gln	Ser	Leu
945					950					955					
Ala	Asp	Asp	Ser	Gly	Lys	Glu	Glu	Glu	Asp	Ala	Glu	Cys	Ile	Asp	Asp
965					970					975					
Asp	Glu	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Asp	Ser	Glu	Lys	Thr	Glu	
980					985					990					
Ser	Asp	Glu	Lys	Ser	Ser	Ile	Ala	Leu	Thr	Ala	Pro	Asp	Ala	Ala	
995					1000					1005					
Asp	Pro	Lys	Glu	Lys	Pro	Lys	Gln	Ala	Ser	Lys	Phe	Asp	Lys	Leu	Pro
1010					1015					1020					
Ile	Lys	Ile	Val	Lys	Lys	Asn	Asn	Leu	Phe	Val	Val	Asp	Arg	Ser	Asp
1025					1030					1035					
Lys	Leu	Gly	Arg	Val	Gln	Glu	Phe	Asn	Ser	Gly	Leu	Leu	His	Trp	Gln
1045					1050					1055					
Leu	Gly	Gly	Gly	Asp	Thr	Thr	Glu	His	Ile	Gln	Thr	His	Phe	Glu	Ser
1060					1065					1070					
Lys	Met	Glu	Ile	Pro	Pro	Arg	Arg	Arg	Pro	Pro	Pro	Pro	Leu	Ser	Ser
1075					1080					1085					
Ala	Gly	Lys	Lys	Lys	Glu	Leu	Ala	Gly	Lys	Gly	Asp	Ser	Glu	Glu	Gln
1090					1095					1100					
Gln	Glu	Lys	Ser	Ile	Ile	Ala	Thr	Ile	Asp	Asp	Val	Leu	Ser	Ala	Arg
1105					1110					1115					
Pro	Gly	Ala	Leu	Pro	Glu	Asp	Ala	Asn	Pro	Gly	Pro	Gln	Thr	Glu	Ser
1125					1130					1135					
Ser	Lys	Phe	Pro	Phe	Gly	Ile	Gln	Gln	Ala	Lys	Ser	His	Arg	Asn	Ile
1140					1145					1150					
Lys	Leu	Leu	Glu	Asp	Glu	Pro	Arg	Ser	Arg	Asp	Glu	Thr	Pro	Leu	Cys
1155					1160					1165					
Thr	Ile	Ala	His	Trp	Gln	Asp	Ser	Leu	Ala	Lys	Arg	Cys	Ile	Cys	Val
1170					1175					1180					
Ser	Asn	Ile	Val	Arg	Ser	Leu	Ser	Phe	Val	Pro	Gly	Asn	Asp	Ala	Glu

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1185          1190          1195          1200
Met Ser Lys His Pro Gly Leu Val Leu Ile Leu Gly Lys Leu Ile Leu
          1205          1210          1215
Leu His His Glu His Pro Glu Arg Lys Arg Ala Pro Gln Thr Tyr Glu
          1220          1225          1230
Lys Glu Glu Asp Glu Asp Lys Gly Val Ala Cys Ser Lys Asp Glu Trp
          1235          1240          1245
Trp Trp Asp Cys Leu Glu Val Leu Arg Asp Asn Thr Leu Val Thr Leu
          1250          1255          1260
Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Ala Tyr Thr Glu Ser Ile
1265          1270          1275          1280
Cys Leu Pro Ile Leu Asp Gly Leu Leu His Trp Met Val Cys Pro Ser
          1285          1290          1295
Ala Glu Ala Gln Asp Pro Phe Pro Thr Val Gly Pro Asn Ser Val Pro
          1300          1305          1310
Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Cys Lys Leu Ser Ile Gln
          1315          1320          1325
Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Gln
          1330          1335          1340
Glu Lys Phe Tyr Ala Thr Leu Val Arg Tyr Val Gly Asp Arg Lys Asn
1345          1350          1355          1360
Pro Val Cys Arg Glu Met Ser Met Ala Leu Leu Ser Asn Leu Ala Gln
          1365          1370          1375
Gly Asp Ala Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile
          1380          1385          1390
Gly Asn Leu Ile Ser Phe Leu Glu Asp Gly Val Thr Met Ala Gln Tyr
          1395          1400          1405
Gln Gln Ser Gln His Asn Leu Met His Met Gln Pro Pro Pro Leu Glu
          1410          1415          1420
Pro Pro Ser Val Asp Met Met Cys Arg Ala Ala Lys Ala Leu Leu Ala
1425          1430          1435          1440
Met Ala Arg Val Asp Glu Asn Arg Ser Glu Phe Leu Leu His Glu Gly
          1445          1450          1455
Arg Leu Leu Asp Ile Ser Ile Ser Ala Val Leu Asn Ser Leu Val Ala
          1460          1465          1470
Ser Val Ile Cys Asp Val Leu Phe Gln Ile Gly Gln Leu
          1475          1480          1485

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<210> 1039

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1039

gcaggagcca gggatgctgc tgaacatccc gcagtgcacg agacaggcct ccaccacacg
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gaattacctt ggctgaggt gttacgagag cacagagaga aaccaggtac agacgctggg
120

cagaggggag agagggagag agtgtgagag ctaagggttc gggagaagac tttgtggaaa
180

aagtctttgg ctgggtcctg caacatagcc aggattcagt gacaggtgag gaccactcca
240

gattttgtat gtattgaagg ccctgaatac ttttttgaaa gagaatgaca tgagtacacc
300

tggtcagcca cacgtgagag gggttggagg agggaagtac cagaggcagg gagaccaggt
 360
 agaaagacct cgccatagt
 379

<210> 1040
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1040
 Met Ala Arg Ser Phe Tyr Leu Val Ser Leu Pro Leu Val Leu Pro Ser
 1 5 10 15
 Ser Asn Pro Ser His Val Trp Leu Thr Arg Cys Thr His Val Ile Leu
 20 25 30
 Phe Gln Lys Ser Ile Gln Gly Leu Gln Tyr Ile Gln Asn Leu Glu Trp
 35 40 45
 Ser Ser Pro Val Thr Glu Ser Trp Leu Cys Cys Arg Thr Gln Pro Lys
 50 55 60
 Thr Phe Ser Thr Lys Ser Ser Pro Glu Thr Leu Ala Leu Thr Leu Ser
 65 70 75 80
 Pro Ser Leu Pro Ser Ala Pro Arg Leu Tyr Leu Val Ser Leu Cys Ala
 85 90 95
 Leu Val Thr Pro Gln Ala Lys Val Ile Pro Cys Gly Gly Gly Leu Ser
 100 105 110
 Arg Ala Leu Arg Asp Val Gln Gln His Pro Trp Leu Leu
 115 120 125

<210> 1041
 <211> 388
 <212> DNA
 <213> Homo sapiens

<400> 1041
 ttagtgcccg tggaggccat cggctacatc gcgagtattg acaaggccga tatgtcaatc
 60
 gaaacggcgt acctgccgcg gctgttggtt tccttggccc tgaccatccc ggtgctcgcc
 120
 ttgtcgatga tcccggccct gcaattcccg cattggccgt tgtgggcgtt ggcgcttacc
 180
 accccggttg tggtctgggg tgccctggccg ctgcaccacg ccgcgtggac caacctgcgg
 240
 caggcgcgcg ccatcatgga caccctggtg tcgctcggcg tcctcacttc gtacctctgg
 300
 tcggtatgga tgctgaccac agggggcgag cacctctacc tggaggtagc cgtccaccgt
 360
 cagcacgctg atcctggccg gcaaattt
 388

<210> 1042
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1042

Leu Val Ala Val Glu Ala Ile Gly Tyr Ile Ala Ser Ile Asp Lys Ala
 1 5 10 15
 Asp Met Ser Ile Glu Thr Ala Tyr Leu Pro Arg Leu Leu Val Ser Leu
 20 25 30
 Ala Leu Thr Ile Pro Val Leu Ala Leu Ser Met Ile Pro Ala Leu His
 35 40 45
 Phe Pro His Trp Pro Leu Trp Ala Leu Ala Leu Thr Thr Pro Val Val
 50 55 60
 Phe Trp Gly Ala Trp Pro Leu His His Ala Ala Trp Thr Asn Leu Arg
 65 70 75 80
 His Gly Ala Ala Ile Met Asp Thr Leu Val Ser Leu Gly Val Leu Thr
 85 90 95
 Ser Tyr Leu Trp Ser Val Trp Met Leu Thr Thr Gly Gly Glu His Leu
 100 105 110
 Tyr Leu Glu Val Ala Val His Arg His Asp Ala Asp Pro Gly Arg Gln
 115 120 125
 Ile

<210> 1043

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1043

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 caggcggtcg cttcggcgcg tcttggggcc gaagtcgcga tggtcggttg cgtgggtacc
 120
 gatgcctacg gcgcgcaatt acgcgacgca ttgttggtgg aaggcatcga ttgccaggcc
 180
 gtcagcaccg tcgacgggtc cagcgggtgtg gcgctgatcg tggtaggatga cagcagccag
 240
 aatgcgatcg ttatcgctgc cggtagcaat ggcgagctga ctccggccaa gttacagacc
 300
 ttgacagcg tgctgcaggc tgccgacgtg attgtctgcc agcttgagac gccgatggac
 360
 actgtcggcc atgcgcctaa gcgcgggtcg gaactgggca agacggtgat cctcaatccg
 420
 gcgcgggcca gcggcccgtt gcctgaggat tggtacgccg ccacgatta cctgattccc
 480
 aacgaaagcg aagcctcggc cttgagtggc gtgggtggtg attcactgga cagcgccaag
 540
 gtcgctgcta cgcgt
 555

<210> 1044

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1044

Thr Gly Glu Thr Leu Ile Gly Gln Ser Phe Ser Thr Val Pro Gly Gly

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      1           5           10           15
Lys Gly Ala Asn Gln Ala Val Ala Ser Ala Arg Leu Gly Ala Glu Val
      20           25           30
Ala Met Val Gly Cys Val Gly Thr Asp Ala Tyr Gly Ala Gln Leu Arg
      35           40           45
Asp Ala Leu Leu Val Glu Gly Ile Asp Cys Gln Ala Val Ser Thr Val
      50           55           60
Asp Gly Ser Ser Gly Val Ala Leu Ile Val Val Asp Asp Ser Ser Gln
      65           70           75           80
Asn Ala Ile Val Ile Val Ala Gly Ser Asn Gly Glu Leu Thr Pro Ala
      85           90           95
Lys Leu Gln Thr Phe Asp Ser Val Leu Gln Ala Ala Asp Val Ile Val
      100          105          110
Cys Gln Leu Glu Thr Pro Met Asp Thr Val Gly His Ala Pro Lys Arg
      115          120          125
Gly Arg Glu Leu Gly Lys Thr Val Ile Leu Asn Pro Ala Pro Ala Ser
      130          135          140
Gly Pro Leu Pro Glu Asp Trp Tyr Ala Ala Ile Asp Tyr Leu Ile Pro
      145          150          155          160
Asn Glu Ser Glu Ala Ser Ala Leu Ser Gly Val Val Val Asp Ser Leu
      165          170          175
Asp Ser Ala Lys Val Ala Ala Thr Arg
      180          185

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<210> 1045

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1045

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ctattgccat actaccgccg cggcaacctc caggacatga tcaacgccaa cctcttcaat
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cactccaaat tccccgagac gcaccttatg aatctatttc tcggcgtctg caaggccctg
120
cgcgccatgc acgattacca cgcaccgccg gcagagcgca tgccaattgg gcaccgaagg
180
cagaccacca cccaggtgca aagcaacagt ggtagagcgg tcgctcatcg acgaaacgta
240
cggaagaaga cgaagagacg gagcaggaaa gacctgttat ggaatcacag aaccacatcg
300
ggcagggcgg cgagcacaaa accatatgcg catcgcgaca ttaaaccagg tacgtgctgc
360
aagctcctcg g
371

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<210> 1046

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1046

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Leu Leu Pro Tyr Tyr Arg Arg Gly Asn Leu Gln Asp Met Ile Asn Ala
1           5           10           15
Asn Leu Phe Asn His Ser Lys Phe Pro Glu Thr His Leu Met Asn Leu

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			20					25					30			
Phe	Leu	Gly	Val	Cys	Lys	Ala	Leu	Arg	Ala	Met	His	Asp	Tyr	His	Ala	
		35					40					45				
Pro	Pro	Ala	Glu	Arg	Met	Pro	Ile	Gly	His	Arg	Arg	Gln	Thr	Thr	Thr	
	50					55					60					
Gln	Val	Gln	Ser	Asn	Ser	Gly	Arg	Ala	Val	Ala	His	Arg	Arg	Asn	Val	
65				70						75					80	
Arg	Lys	Lys	Thr	Lys	Arg	Arg	Ser	Arg	Lys	Asp	Leu	Leu	Trp	Asn	His	
				85					90					95		
Arg	Thr	Thr	Ser	Gly	Arg	Ala	Ala	Ser	Thr	Lys	Pro	Tyr	Ala	His	Arg	
			100					105						110		
Asp	Ile	Lys	Pro	Gly	Thr	Cys	Cys	Lys	Leu	Leu						
		115					120									

<210> 1047

<211> 754

<212> DNA

<213> Homo sapiens

<400> 1047

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120	cgcaacctca	acaagaacga	agtgacctag	gtactgtgca	tgcagcggcc	acccccgggt
180	gtgaaactgg	tcatagaagc	tgtgtgcatt	atgaaaggca	tcaagcccaa	gaaggtgcct
240	ggagaaaagc	caggcaccaa	ggtggatgac	tactgggagc	ctggcaaggg	gctgctgcag
300	gacccggggc	acttccttga	gagcctcttc	aagtttgaca	aggacaacat	tggagatgtg
360	gtgatcaaag	ccatccagcc	gtacatcgat	aatgaagagt	tccagccagc	caccattgcc
420	aagggtgtcca	agggttgccc	cttcatttgg	ccgtgggggg	gggcaatgcc	caagtacccc
480	tttgtggcca	aggccgtgga	gcccaagcgg	caagccctgc	tggaggccca	ggatgacctg
540	ggggtgacac	agaggatcct	ggatgaggca	aaacagcgcc	ttcgtgaggt	ggaggacggc
600	atcgccacaa	tgcaggctaa	gtaccgggaa	tgcattacca	agaaggagga	gctggagctg
660	aagtgtgagc	agtgtagca	gcggctgggc	cacgctggca	aggtgcgcac	cctcctcctg
720	caaggcctgc	aagcggggcc	ggcccagaca	ggggccagaa	aggaccaggg	cgccggtggg
754	tctgggggtg	gctgtccaac	cccctccctg	gcaa		

<210> 1048

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1048

Xaa Ala Gln Lys Asp Leu Asp Glu Ala Leu Pro Ala Leu Asp Ala Ala

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		20						25					30		
Ala	Met	Gln	Arg	Pro	Pro	Pro	Gly	Val	Lys	Leu	Val	Ile	Glu	Ala	Val
		35					40					45			
Cys	Ile	Met	Lys	Gly	Ile	Lys	Pro	Lys	Lys	Val	Pro	Gly	Glu	Lys	Pro
		50				55					60				
Gly	Thr	Lys	Val	Asp	Asp	Tyr	Trp	Glu	Pro	Gly	Lys	Gly	Leu	Leu	Gln
65					70					75					80
Asp	Pro	Gly	His	Phe	Leu	Glu	Ser	Leu	Phe	Lys	Phe	Asp	Lys	Asp	Asn
			85						90					95	
Ile	Gly	Asp	Val	Val	Ile	Lys	Ala	Ile	Gln	Pro	Tyr	Ile	Asp	Asn	Glu
		100						105					110		
Glu	Phe	Gln	Pro	Ala	Thr	Ile	Ala	Lys	Val	Ser	Lys	Gly	Cys	Pro	Phe
		115					120					125			
Ile	Trp	Pro	Trp	Gly	Gly	Ala	Met	Pro	Lys	Tyr	Pro	Phe	Val	Ala	Lys
	130					135					140				
Ala	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Leu	Glu	Ala	Gln	Asp	Asp	Leu
145					150					155					160
Gly	Val	Thr	Gln	Arg	Ile	Leu	Asp	Glu	Ala	Lys	Gln	Arg	Leu	Arg	Glu
				165					170					175	
Val	Glu	Asp	Gly	Ile	Ala	Thr	Met	Gln	Ala	Lys	Tyr	Arg	Glu	Cys	Ile
		180						185					190		
Thr	Lys	Lys	Glu	Glu	Leu	Glu	Leu	Lys	Cys	Glu	Gln	Cys	Glu	Gln	Arg
		195					200					205			
Leu	Gly	His	Ala	Gly	Lys	Val	Arg	Thr	Leu	Leu	Leu	Gln	Gly	Leu	Gln
	210					215					220				
Ala	Gly	Pro	Ala	Gln	Thr	Gly	Ala	Arg	Lys	Asp	Gln	Gly	Ala	Gly	Gly
225					230					235					240
Ser	Trp	Gly	Gly	Cys	Pro	Thr	Pro	Ser	Leu	Ala					
			245						250						

<210> 1049

<211> 558

<212> DNA

<213> Homo sapiens

<400> 1049

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atgctgcaga tccttacagg ctgactgcag ggtgtttcag attctcctgg agtcacacgt

120

gccagcttga tttcaagaaa caactagaat aacagttttc tgataagaag tctatagcac

180

tttatggctt acataatcca gagatagatg ggctgggcat gattccatt ttctgttggg

240

gaaaccgact cacagagaag ttaagggaca agtataaagt gatgaaactg tgtactgaac

300

ctcatgtctc ccagactccc ggggtccccg gctttttctc ggggcggccc cattcacatt

360

gcaattcatg gccggggcaa atgctcacc cagagatat taagcactcc aacactccat

420

ccaccagggt gcagccaaag gattcagaag acaatgatca ttccatcagc atgcactatg

480

cagctaaaga aaggttttgg catgctctgc tttattgttt cacagaagat aagaaaataa
 540
 actgcaaagt aacttaag
 558

<210> 1050
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1050
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 1 5 10 15
 Asp Lys Tyr Lys Val Met Lys Leu Cys Thr Glu Pro His Val Ser Gln
 20 25 30
 Thr Pro Gly Ser Pro Gly Phe Phe Ser Gly Arg Pro His Ser His Cys
 35 40 45
 Asn Ser Trp Pro Gly Gln Met Leu Thr His Arg Asp Ile Lys His Ser
 50 55 60
 Asn Thr Pro Ser Thr Arg Leu Gln Pro Lys Asp Ser Glu Asp Asn Asp
 65 70 75 80
 His Ser Ile Ser Met His Tyr Ala Ala Lys Glu Arg Phe Trp His Ala
 85 90 95
 Leu Leu Tyr Cys Phe Thr Glu Asp Lys Lys Ile Asn Cys Lys Val Thr
 100 105 110

<210> 1051
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 1051
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 aatccgggta atcttcgtct caatttcagt cacatcgcac cggagcgtct ggacgaagggt
 120
 ctcaagcgcc tggctgctgt catccgtcac gcacaggctg cacaagcggc ttaaggggag
 180
 ggccatgtac aaggtttatg gcgattacca gtcgggcaat tgctacaaga tcaagctgat
 240
 gctgcacctg ctggggcagg aatatcgtct gcacccgggg gacatcctca aggtgacacc
 300
 gagaccccg aattttt
 317

<210> 1052
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 1052
 Ala Leu Ser Arg Asp Val Ala Phe Met Pro Gly Glu Pro Phe Phe Ala
 1 5 10 15
 Glu Pro Glu Arg Asn Pro Gly Asn Leu Arg Leu Asn Phe Ser His Ile

```

                20                25                30
Ala Pro Glu Arg Leu Asp Glu Gly Leu Lys Arg Leu Ala Ala Val Ile
                35                40                45
Arg His Ala Gln Ala Ala Gln Ala Ala
                50                55

```

<210> 1053
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1053
caattggcta cgcgatccga acgggcgcat ggggtctctat gactggcaag ccgtcgctcg
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cggggagtgg gccctcgact atgcctacgc gatgtcgggtg aacctgacca ccgagaaccg
120
gcgtgcctgg gaacgcgacc tgctcgagcg ttatctgtgg cgctcgccg aagaggggtgt
180
cgccaacccg ccctcgttcg agcaagcgtg gctacgctac cggcaacagc cgttccacgt
240
cgggatcttc tctctcttga ccatcgggcg cggacgcttt caaccggcca tgcaaccggc
300
ggactcnnnn ccccnenc
318

```

<210> 1054
 <211> 96
 <212> PRT
 <213> Homo sapiens

```

<400> 1054
Met Gly Leu Tyr Asp Trp Gln Ala Val Ala Arg Gly Glu Trp Ala Leu
 1          5          10          15
Asp Tyr Ala Tyr Ala Met Ser Val Asn Leu Thr Thr Glu Asn Arg Arg
          20          25          30
Ala Trp Glu Arg Asp Leu Leu Glu Arg Tyr Leu Trp Arg Leu Ala Glu
          35          40          45
Glu Gly Val Ala Asn Pro Pro Ser Phe Glu Gln Ala Trp Leu Arg Tyr
          50          55          60
Arg Gln Gln Pro Phe His Val Gly Ile Phe Ser Leu Leu Thr Ile Gly
65          70          75          80
Ala Gly Arg Phe Gln Pro Ala Met Gln Pro Ala Asp Ser Xaa Pro Xaa
          85          90          95

```

<210> 1055
 <211> 391
 <212> DNA
 <213> Homo sapiens

```

<400> 1055
tacaatgtat catcaaccag aaatacaatg agaaccacct gccagtctcc caaatactat
60
ctgcagccac tcatttaact ctctggcta gctccacgtg ggccgtctga actctcttag
120

```

aagaatcatc tctctgctca ggcaccggga gcaaggggca tctgtcgctc tgcagaacgg
 180
 aggggaccag gcctgatgaa caccatcctg ggcccagaaa cctgggaggg taaagagaac
 240
 tgccaggggt gaagtccaag gatgggaaaa aggcctccgg ggcagagtcc tgaaatgtca
 300
 gaagtacacc aaagaggaaa cagcatcacg ttattgctga ggcagggcct cattctgttg
 360
 ccaaggctgc agtgcagtgg tgacaccatg g
 391

<210> 1056

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1056

Met	Val	Ser	Pro	Leu	His	Cys	Ser	Leu	Gly	Asn	Arg	Met	Arg	Pro	Cys
1				5				10					15		
Leu	Ser	Asn	Asn	Val	Met	Leu	Phe	Pro	Leu	Trp	Cys	Thr	Ser	Asp	Ile
		20						25				30			
Ser	Gly	Leu	Cys	Pro	Gly	Gly	Leu	Phe	Pro	Ile	Leu	Gly	Leu	His	Pro
		35					40					45			
Trp	Gln	Phe	Ser	Leu	Pro	Ser	Gln	Val	Ser	Gly	Pro	Arg	Met	Val	Phe
	50					55					60				
Ile	Arg	Pro	Gly	Pro	Leu	Arg	Ser	Ala	Glu	Arg	Gln	Met	Pro	Leu	Ala
65				70						75				80	
Pro	Gly	Ala													

<210> 1057

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1057

gaattccctg cgcgtgtgac gccggtcgcc gagcaactcg gcgtgtcgct gacgctgcat
 60
 cccgatgata cgccgcgtcc gctgttcggg ttgccgcgca ttgcgtccag cgccgaggac
 120
 tatcaggcgc tggttcgatgc ggtaccgtcc aaggcgaacg gcatctgctt gtgcacgggt
 180
 tcgctcggcg tgcgcgcgga gaacgatctg cctgaaatgg ccgaacgttt cggcccgcgt
 240
 atgccttttg cgcattctgcg cgcgaccaag cgcgacgccg atggcctgtc gtttcatgaa
 300
 tccgaccatc tcgacggcga tgtcgacatg gtgcgtgtct c
 341

<210> 1058

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1058

```

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
1           5           10           15
Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
20           25           30
Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
35           40           45
Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
50           55           60
Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
65           70           75           80
Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
85           90           95
Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
100           105           110
Cys

```

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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nagctgaccg gctggcagat caacatcatg acgccggaag aaagcgtgaa ccgccgggaa
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gtcgagcggtt cgggcctgcg caccacgttc atgaacaagc tggacgtcga tgaggaagtc
120
gccgacatcc tgcacgacga aggtttcacc ggtatcgagg aaatcgacta cgtcccatg
180
caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccgt
240
gcccgcgaatg cgctgctgac cgaggccatc gcccgaggaag agcgccttga gaccgcgcag
300
gatctgcttg aactcgaagg cgtgacgcgc gaactggctg ccaagctggc cgagcgtcaa
360
gtgcgtacgc gt
372

```

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

```

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
1           5           10           15
Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn
20           25           30
Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
35           40           45
Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
50           55           60
Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

```

```

65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

```

<210> 1061
 <211> 456
 <212> DNA
 <213> Homo sapiens

```

<400> 1061
tctagactcc atggcaccgg gctgagcggg taagtaagaa agataaaaag tgccttttgc
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cccttcgagg aaaccctttt gcaggccaag caagggctgc aagtgtttgg gagctgagag
120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
gggacacgaa gggctcttcg gaccctgtg cctcttctgc cccaagggcg agaagacggg
240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
ggtctgaacc tggatgggga gaagaaattg aagtgccttg gagacggggg ggcttaaaac
360
actagggagc ctcacgccc agccttgggc ccactttcct ttcgatcgtg aggattccgc
420
acccgaagc cgtcttctcg gggctccggg gcgcgc
456

```

<210> 1062
 <211> 125
 <212> PRT
 <213> Homo sapiens

```

<400> 1062
Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
1      5      10      15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
20     25     30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
35     40     45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
50     55     60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65     70     75     80
Arg Ile Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
85     90     95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
100    105    110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
115    120    125

```

<210> 1063

<211> 3760

<212> DNA

<213> Homo sapiens

<400> 1063

```

ntagtagaga cagggtttca ccatgttggc caggctggtc ttgaactcct gagcttgtga
60
tccacccgcc tcagcctccc aaagtgtggt gattacaggc gtgacgactg caccagcct
120
taaggtctta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
180
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag
240
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttaa
300
aagtaattga gtaaagtcac aggaaatgtg accatataaa ggaatggctc taaatgtatt
360
aatccagaag gaagcaacag gttaaacagt aagaggtaag aaacaaaaaa taaggaacga
420
gagagagaga gtgacagggg gagagagaca gagcggggaa ggagagaatg agaaggaaaa
480
tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc
540
tgaatcaatt taagaattgc catgtctaata tcttatatgg aagatttgaa atacaaggat
600
attgaaagga ataacaaatt ataatgaatg catagaaatc cttatgtaat ccaaggtcac
660
taatttgaag gaagacatca agaaaatgtg atctagaaat aaaggttgag attgctccat
720
ttacaaaatt attatgctct ataactcttc catatgcaaa tatttcatat tcctctttt
780
gtcccatgga catatttcac agcaacaacg aatcaagtgc tgacctaaat ggggtatctg
840
ttaaaactta gtatattgat atccttcacc ccactccagg aacgttcgct acgctaggac
900
tgcattcttg gaacagaatt tttagagatga tcatctctta catcagaagc aggatctaaa
960
tgatccctgg atgccaatt tcctgacctt gctattgttg tgggtggcaa gataagagga
1020
gttgcatcac agatgaaaaa gtaaggccga agaagaccag agaagagttg gttgaatgtg
1080
tagatataag atccatctgt gacattgtag aatgaaattt caccggcttc atagtccaag
1140
aaaatcccaa tgcagtgagg actttccagt tggagaagag gcactgatgg ggaggcaagg
1200
accatgtact cattcccttt cagcagccac agggcccaga cccattctc aggatgggc
1260
gtggtttccc cttttcttgg cagtgtgtct tgacagaccc ctaaaccca ctctgtcct
1320
tctccacca gaacctccca gtaatgcctc cctgatgaga agctctgcaa acccaggatg
1380
cagggccatg tgtcaaactg ctcagggttg ttggggacat cctccatgg ttctccatcc
1440

```

tgcacactgc gcaggtcggc ggtcaagagc agactcgggt gcgccgtggc gggatccagc
 1500
 ttacatcca cttggaactt ccttaagagc tccctcctcc cagggatgca gcatgctgtc
 1560
 ttcagttcca tggggatggt ctctgcttcc agccttgtga cagccttact tctgctcagg
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 1680
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 1740
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 1860
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 1920
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 2040
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 2160
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 2280
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 2340
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 2400
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 2460
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 2580
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 2640
 tacaatgtca cagatggatc ttatatctac acattcaacc aactcttctc tggctcttct
 2700
 cggccttact ttttcatctg tgatgcaact cctcttatct tgccaccac gacaatagca
 2760
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 2820
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 2880
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 3000
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 3180
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 3300
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 3600
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 3660
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

Met	Gln	Gly	His	Val	Ser	Asn	Arg	Ser	Gly	Leu	Leu	Gly	Thr	Ser	Leu
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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35					40					45			
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50					55					60				
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65				70						75				80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100						105				110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115					120				125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130					135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150						155				160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165					170				175			
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

				180				185				190				
Glu	Glu	Gln	Arg	Gln	Leu	Arg	Arg	Leu	Glu	Ala	Glu	Glu	Arg	Ala	Thr	
195				200				205								
Leu	Gln	Arg	Leu	Arg	Glu	Ser	Lys	Ser	Arg	Leu	Val	Gln	Gln	Ser	Lys	
210				215				220								
Ala	Leu	Lys	Glu	Leu	Ala	Asp	Glu	Leu	Gln	Glu	Arg	Cys	Gln	Arg	Pro	
225					230				235				240			
Ala	Leu	Gly	Leu	Leu	Glu	Gly	Val	Arg	Gly	Val	Leu	Ser	Arg	Ser	Lys	
245				250				255								
Ala	Val	Thr	Arg	Leu	Glu	Ala	Glu	Asn	Ile	Pro	Met	Glu	Leu	Lys	Thr	
260				265				270								
Ala	Cys	Cys	Ile	Pro	Gly	Arg	Arg	Glu	Leu	Leu	Arg	Lys	Phe	Gln	Val	
275				280				285								
Asp	Val	Lys	Leu	Asp	Pro	Ala	Thr	Ala	His	Pro	Ser	Leu	Leu	Leu	Thr	
290				295				300								
Ala	Asp	Leu	Arg	Ser	Val	Gln	Asp	Gly	Glu	Pro	Trp	Arg	Asp	Val	Pro	
305					310				315				320			
Asn	Asn	Pro	Glu	Arg	Phe	Asp	Thr	Trp	Pro	Cys	Ile	Leu	Gly	Leu	Gln	
325				330				335								
Ser	Phe	Ser	Ser	Gly	Arg	His	Tyr	Trp	Glu	Val	Leu	Val	Gly	Glu	Gly	
340				345				350								
Ala	Glu	Trp	Gly	Leu	Gly	Val	Cys	Gln	Asp	Thr	Leu	Pro	Arg	Lys	Gly	
355				360				365								
Glu	Thr	Met	Pro	Ser	Pro	Glu	Asn	Gly	Val	Trp	Ala	Leu	Trp	Leu	Leu	
370				375				380								
Lys	Gly	Asn	Glu	Tyr	Met	Val	Leu	Ala	Ser	Pro	Ser	Val	Pro	Leu	Leu	
385					390				395				400			
Gln	Leu	Glu	Ser	Pro	Arg	Cys	Ile	Gly	Ile	Phe	Leu	Asp	Tyr	Glu	Ala	
405				410				415								
Gly	Glu	Ile	Ser	Phe	Tyr	Asn	Val	Thr	Asp	Gly	Ser	Tyr	Ile	Tyr	Thr	
420				425				430								
Phe	Asn	Gln	Leu	Phe	Ser	Gly	Leu	Leu	Arg	Pro	Tyr	Phe	Phe	Ile	Cys	
435				440				445								
Asp	Ala	Thr	Pro	Leu	Ile	Leu	Pro	Pro	Thr	Thr	Ile	Ala	Gly	Ser	Gly	
450				455				460								
Asn	Trp	Ala	Ser	Arg	Asp	His	Leu	Asp	Pro	Ala	Ser	Asp	Val	Arg	Asp	
465					470				475				480			
Asp	His	Leu														

<210> 1065

<211> 892

<212> DNA

<213> Homo sapiens

<400> 1065

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60

taccatgctt cacaaaggga gaagatcaaa qtgaccctcc cccatggctt tggaaccttc

120

ttgtccagtc tggaaaggggg gaagaagaga tgagggggaag gctgtccagg ggggtgcaag

180

gccctagaga cccagcagag aagggactct ggccactgaa gggggccctcc cattgtggct

240

ctgggtccct agagcagctc cagcttcttg gcctcccccg tctgatgctt agctcatccc
 300
 atccccctgga gtgctgtgga gcttagatga aacagcccag tgctcactct tcaatgagcc
 360
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg
 420
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
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 540
 agtgaagggtt gaggaatcat ttctctatgg cccaagacgt ttctctctgc agttgtcatg
 600
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 660
 gccctttgta ggagggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccg
 720
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
 tccaacgaat cccggatcca gacggagtcc caccgcgttg caggagagga catgctgggtg
 840
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1			5				10				15				
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
		20					25				30				
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
	35					40				45					
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50				55				60						
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70				75						

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 60
 gttctcaccg atcccagagg caaccgtcac ctactgaca tgcaccaggt cgagccctgg
 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

gctgccatcg acgtcgaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc
 300
 cggcacgccc agcaatccgg ggatactgac gcgatcacgg ctctgcgcga gaccgatgcc
 360
 aacctaaccc ttgaccgtgc ccccgactcg ctacaacagg tcatcaacac ctacgcgt
 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

Glu	Phe	Glu	Val	Thr	Ala	Asn	Val	Phe	Arg	Glu	Gly	His	Asp	Ala	Val
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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
		20					25					30			
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
	35					40					45				
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
50					55				60						
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65				70					75					80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
			85					90					95		
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
	100						105					110			
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
	115					120					125				
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
130						135									

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 cagttcatat gccgtcactc ccagggacca ccagtcaaca gcaaaggaat agcctgctcc
 120
 ttttctggag ctgaacatct caggtgccat gtaaggcttg gtgccagcca tgggtggagac
 180
 ctgcgttata acctgcaaca gaacgtccac ttcaaggaag aaacagtga gctcttcatc
 240
 tgtgagctgg tcatggccct ggactacctg cagaaccagc gcatcattca cagggatatg
 300
 aagcctgaca atattttact tgacgaacat gggcacgtgc acatcacaga tttcaacatt
 360
 gctgcgatgc t
 371

<210> 1070

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1070
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 1 5 10 15
 Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
 20 25 30
 Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35 40 45
 Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50 55 60
 Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
 65 70 75 80
 Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
 85 90 95
 His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
 100 105 110
 Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
 115 120

<210> 1071
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 1071
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 60
 ggagtttctgt caaggaagac ggacaaatcg tcattgatga gaatggcaac agggtttcat
 120
 cccacccgaa gtacgtggcc ttggagtgcc attcgcactc cacttggcca ccgtttgcac
 180
 tcgacctaac cagcaattgc atctcgtttg acctgctcgc gttgtcaaca tcatagcaac
 240
 gagcgcccaa tagcagagtt ctggatcatcc tgttcgccc ttctctctat ttgaagcctc
 300
 agtttcagca aagagctggt tatgagtttt cgtcaaacg gcgcttgat aggcataagg
 360
 ggtataccta tgatgcgtgt attcacagtt aaaaagggtt ctctcatggg ccatacagct
 420
 tcaaacaaag acgatcttct caaacgcgtg aaacgcacg cggggcaaat ccaggccgtt
 480
 gagcgtgcac tggagtcgga tgccgattgc gcgaaaacat tgcattctgt agctgccaca
 540
 cgtggagcta tcaacggctt gatggacgaa attattgagg atcacgccag aaaacatgtg
 600
 gcgagcccaa cgcttagcga ttaataacgc aacaagggtg tcgaagagct tcttgaagcc
 660
 attcgccgct actccaagtg aagaatccag gtacatgtcc atgagtagca gcccataat
 720
 cgagattagc cacatacatg accatgtggt ccttgggtca gcacgcgaag aaaatgccaa
 780

gcgtagccctt tgggttggtg cgttacggg ggtgatgatg gttggcgaaa tcgtcgccgg
 840
 ctatctcact ggetcaatgg ctttacttgc cgacggggtt tcacaaggca accccatgca
 900
 ggcgcttttg gcatcgctgc agctgcctac ggttacgcaa aacgccacgc ttccagcagt
 960
 cgttatagct tcggtacggg caagggttga gacctagg
 998

<210> 1072
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 1072
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 Arg Ile Ala Gly Gln Ile Gln Ala Val Glu Arg Ala Leu Glu Ser Asp
 20 25 30
 Ala Asp Cys Ala Lys Thr Leu His Leu Val Ala Ala Thr Arg Gly Ala
 35 40 45
 Ile Asn Gly Leu Met Asp Glu Ile Ile Glu Asp His Ala Arg Lys His
 50 55 60
 Val Ala Ser Pro Thr Leu Ser Asp
 65 70

<210> 1073
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 1073
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 60
 tacaatggac aattttctat tcttcaagta cactcttccc atgtcccaac tgggatgctt
 120
 tccccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tctacttca
 180
 gaaagtcttg tttctccata tccttcgtaa ccaccacctg gtgcacatgc tgaaggcaga
 240
 attcattgtc tctctcctt cactctcgaa tagctttgcc cagaccctca ggtactcctt
 300
 catectctgt ataatatattg gttttcacct ctttatgaac tcttttgtat tctcattact
 360
 ggctctggaa ccagagaacat accacggggt caaggatatgt tttaatgaat tgaatggaat
 420
 aaattttgtt gtgcttatgc agatacagat gccactaaac actgatca
 468

<210> 1074
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1074

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Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
 1           5           10           15
Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
          20           25           30
Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
          35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
          50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
          85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
          100          105          110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
          115          120          125
Met Pro Leu Asn Thr Asp
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<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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cagcagcaag aacaaacagc ttcgcaacga cttcaagctg gtggagaaca ttctggccaa
120
gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
180
ggctgtggtg gtgaagtccg tccagagggg cttgctggct gaggtggctg gcctgcaggt
240
ggggaggaag atctactcca tcaatgagga cctgggtgtt ctgcggccgt tttagaggt
300
ggagtccatc ctcaaccagt ctttctgctc ccgcccct ctgcgcctcc tgggtggccac
360
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420
tggagctgcc ccaccgtacg tctatgtgtg ggggagaggc tctgaggcca tggctgcagg
480
gctctgtgct ggtcagtgc ttttgaaggt caatggcagc aacgtgatga acgatgggtc
540
ccctgaggtc ctggagcact tccaggcatt ccggagtcgg cgccaagagg ccctgggcct
600
gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
660
ctccactgag gaccccagtg gcgagcaggc ccaggaggaa gaccaggctg attcagcctt
720
cccactgctg tccctgggtc cccggctgag cctgtgtgag ggcagcccca tggtcacct
780
gactgtggac aacgtgcacc tggaacacgg cgtgggtgtat gagtatgtga gcacggcagg
840

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cgtcaggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcacgcg
 900
 caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggct
 960
 catggccctg agcagcgcca tcgtgaccat gccccacttt gagttccgca acatctgtga
 1020
 caccaagctg gagagcattg gccagaggat tgctgtctac caggagtttg cagcccaact
 1080
 gaagagcagg gtcagcccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg
 1140
 cctacttctg cccaccaat tgccacatca acctcatgga agtgtcctac cccaagacca
 1200
 cccctcagt gggcaggtcc ttcagcatcc gctttggacg caaacctcc ctcacggcc
 1260
 ttgaccggga gcaaggccac ctgaacccca tgcgtacac ccagcactgc atcaccacca
 1320
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 1380
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 1440
 gcttctact caagcaggag gaccgtgaga tccaggatgc ctacctgag ctcttcacca
 1500
 agctggatgt ggccctgaag gagatgaagc aatatgtcac ccagatcaac aggtgctgt
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 ccaccatcac agagcccacc tcgggtgggt cctgcgacgc atccttggct gaggaggcct
 1620
 cctccctgcc cct
 1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1				5				10						15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
			20					25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
			35				40					45			
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
			50			55					60				
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65					70					75				80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
					85										

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

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 gcaaacgagg caacatgttt gcgcctcgcc ggagcaccct caccagcga tgctttgttt
 120
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgtcgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
 360
 agggcggtcc gggcgcattht acgcgcgcgg gcaccaagat tgcgacgtac actcgcgcg
 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
1				5					10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
			35				40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55				60					
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln	
			85					90					95		
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115				120					125				
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
		130				135									

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 60
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 120
 gctcaaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag
 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

tttaccccaa gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact
 300
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg
 360
 tttccctttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt
 420
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg cgcacttgac
 480
 cacagcacct tgttcctttc tgtaatctag acacttctgc acaatagagg gccaccct
 540
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 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
1			5					10					15		
Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20				25				30				
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
			35			40					45				
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
			50			55				60					
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70				75					80		
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
			85				90						95		
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
			100				105						110		
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
			115				120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctcctgt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggagggtgcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta
 300
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctcaagtcaa caaggaattc
 360

cccaaccaag aatccttget gaagcatgtt accattcact ttatgatcac ttcaacgtat
 420
 tacatctgtg agagttgtga caagcaattc acatcagtg atgaccttca gaaacacctg
 480
 ctggacatgc acacctttgt cttctttcgc tgcacccctc gccaggaagt ttttgactca
 540
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 600
 tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac
 660
 aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc
 720
 accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc
 780
 tgtagcaaag ccttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt
 840
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 900 agctgcagac tttgtgacc aacagccagg agtcccacaa cagtcacgat 960
 gggagcgaag aagacgttga cacctctgag cctatgtacg gctgcgacat ttgtggggca
 1020
 gcctacacta tggaaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct
 1080
 ggagaaagtg ccacgtgaa aaagaaagct gagctcatta aagggaatta caagtgcagc
 1140
 gtgtgctctc gaaccttctt ctccgaaaat ggccctccggg aacatatgca gaccaccta
 1200
 ggccctgtca aacactacat gtgccctatt tgcggagagc ggtttccctc ccttttaact
 1260
 ctactgaac acaaagtcac gcatagtaag agtcttgata ctggaaactg ccggatttgc
 1320
 aagatgcctc tccagagtga agaggagttt ttagagcatt gccaaatgca ccctgacttg
 1380
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 1500
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 1560
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 1620
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 1680
 aatagaccag gcttggggca gaatgagaat ctgagtgcc a ttggggaaaag gcaaggtggg
 1740
 gggactgaaa cacgctgctc tagctgcaac gttaagtgtg agtctgaaag tgaactccag
 1800
 aaccacatcc aaaccatcca ccgagagctc gtgccagaca gcaacagcac acagttgaaa
 1860
 acgccccaa g taccaccaat gccagaatc agtccctccc agtcggatga gaagaagacc
 1920
 tatcaatgca tcaagtgtca gatggttttc tacaatgaat gggatattca ggttcatgtt
 1980
 gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt
 2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggagggc
 2100
 accttcaagt gtccagtctg ctttacagta tttgttcaag caaacaagtt gcagcagcat
 2160
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 2220
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 2280
 tacagtctct caaggagaat tgattttgtg gcacaaaaag ggaacatggt ttactctttg
 2340
 caggaactt tcattgttaa tgtatattat tcagaaacat tgtattgtac cataaaactt
 2400
 gtattatcaa actggtggat gttcatgtgt ttgaactttt gcgcaccgga tagaccctt
 2460
 gtatataaag tgttgacat gtattatgtc gtctgatact aaaatgggtct tataaagaca
 2520
 agtggacttg ggccctattc aggcaagatt aaaaaaaaaa aaaagactat gaccaaagt
 2580
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 2640
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 2700
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 2760
 acagaacaga accccacagc tggataaggc ccgtatatat atatttgtaa gccttgcaat
 2820
 gtgacaggta gcatactat atatgcaata gttgttatgt agactgtcaa agaatttttt
 2880
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 2940
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 3077

<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

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Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
			20					25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
			35				40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
	50					55					60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70					75				80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

1017

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      515                      520                      525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
530                      535                      540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545                      550                      555                      560
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
565                      570                      575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
580                      585                      590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
595                      600                      605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
610                      615                      620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625                      630                      635                      640
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
645                      650                      655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
660                      665                      670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
675                      680                      685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
690                      695                      700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705                      710                      715                      720
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
725                      730                      735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
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Thr Gln His Ser Ser
755

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<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
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240
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300
ggcatgaagt ggctcttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctcgtcg agggcgctcat cattgcctcc tacgccatca aggccaagat gccttcac
480

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516

<210> 1084
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1084
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Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu
20 25 30
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro
35 40 45
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly
50 55 60
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp
65 70 75 80
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro
85 90 95
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu
100 105 110
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala
115 120 125
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg
130 135 140

<210> 1085
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1085
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aaatcgtaga gtgtctctga gctgcctagg gggctgtttg cgatcttgcg gacagtgtct
120
atatccacaa gggttcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct
180
ttgctgcgtt cgtagtcttg gtgcaggtcg aagctgtagt cgcttttgta gatgtcccgg
240
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360
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374

<210> 1086
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1086

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Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1             5             10             15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
          20             25             30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
          35             40             45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
          50             55             60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65             70             75             80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
          85             90             95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
          100             105             110

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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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ggcatccacc cgcacgacct cggccaggctc ctgcacgacc acggcgtgag catccgggtg
120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgtttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcgggcc
240
gcccggaat ttttcggagt gcattaggat tgggtctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcaggggtga aggtccctt
360
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420
ctt
423

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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1             5             10             15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
          20             25             30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
          35             40             45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
          50             55             60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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[illegible]

75

80

<210> 1089

<211> 750

<212> DNA

<213> Homo sapiens

<400> 1089

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120	agagtggtaa	gaatggggct	cggggaagaa	gccttacccc	ttttcttctt
180	aaaggacttt	tgggccaaag	tcaccctagc	cttctcttgg	gggcctcaat
240	tctgtaaaaa	atgggggggt	aattcagaag	taccctcctt	attgtcaggg
300	gggagtaaaa	agaaattggc	ttgggaaaat	acttaataca	gggcctgggc
360	tattcacaaa	atgctagcag	ttatcaccac	agtgggagcc	acagggagct
420	gcagggatgt	cgagggatgg	gacagaactt	gattgaaggc	agacagacct
480	gactcagaca	gaatgatcac	tgatccagcg	agacgtcagg	atcgagagga
540	gagtcaggag	ggtgggcctg	cgccagtgtc	gccccgactc	tgttcagtaa
600	aacacagaag	ggcatgtgcg	gagacacacg	tgatcacgct	agtgatgcag
660	agacaaaaga	ccgagacagg	agctaggcag	acacacagac	agagacagcc
720	atgtagacag	ggataatgac	aggaacgcgt		
750					

<210> 1090

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1090

Met	Val	Thr	Trp	Val	Glu	Leu	Lys	Gly	Arg	Leu	Thr	Gln	Glu	Met	Ala
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Cys	Glu	Asp	Lys	Thr	Lys	Gly	Gly	Arg	Val	Gly	Gln	Arg	Gln	Tyr	Ile
			20					25					30		
Arg	Val	Val	Arg	Met	Gly	Leu	Gly	Glu	Glu	Ala	Leu	Pro	Leu	Phe	Phe
			35				40					45			
Phe	Asn	Leu	Ala	Lys	Gly	Leu	Leu	Gly	Gln	Gly	His	Pro	Ser	Leu	Leu
	50					55					60				
Leu	Gly	Ala	Ser	Ile	Phe	Leu	His	Ser	Val	Lys	Asn	Gly	Gly	Val	Ile
65					70					75					80
Gln	Lys	Tyr	Pro	Pro	Tyr	Cys	Gln	Gly	Phe	Gly	Glu	Gly	Ser	Lys	Lys

85 90 95
 Lys Leu Ala Trp Glu Asn Thr
 100

<210> 1091
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 1091
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 120
 catggccttg ccgaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc
 180
 gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga
 240
 caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat
 300
 cgtttaaccg agtcggatta taatatttta cggaaacaac ccattcgctt ggcagataaa
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 438

<210> 1092
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1092
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 1 5 10 15
 Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
 20 25 30
 Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
 35 40 45
 His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
 50 55 60
 Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
 65 70 75 80
 His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
 85 90 95
 Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
 100 105 110
 Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
 115 120 125
 Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
 130 135 140
 Cys Met
 145

<210> 1093
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1093
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 gatgcccga tgggtgccga agctgtccgt gaactgctgc acgtatcga cctggaacac
 180
 gagattggcc gtctgcgtga acaaattccg caaaccaact ccgaaaccaa gatcaagaag
 240
 ctgtccaagc gtctgaagtt gatggaagcc ttccagggtt ccggcaactt gccagagtgg
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 351

<210> 1094
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1094
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 1 5 10 15
 Thr Leu Glu Lys Gly Gln Leu Leu Asn Asp Glu Gln Tyr Phe Glu Ala
 20 25 30
 Leu Glu Glu Phe Gly Asp Asp Phe Asp Ala Arg Met Gly Ala Glu Ala
 35 40 45
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg
 50 55 60
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys
 65 70 75 80
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn
 85 90 95
 Leu Pro Glu Trp Met Val Leu Thr Val Leu Pro Val Leu Pro Pro Asp
 100 105 110
 Leu Arg Pro Leu Val
 115

<210> 1095
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1095
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 120
 agccagcggc agatccgcgg ggagatcgac agcctgcgcc aggagaagga ctactgtctc
 180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag
 240
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 300
 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc
 360
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 420
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 480
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 619

<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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Ser	Ser	Arg	Leu	Glu	His	Leu	Glu	Lys	Glu	Leu	Ser	Glu	Lys	Ser	Gly
			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
		35					40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50					55				60					
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
65					70					75				80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
			85						90					95	
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100				105						110		
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
		115					120					125			
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
	130					135					140				
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150					155				160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
			165						170					175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
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Arg	Ala	Ala													
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<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

<400> 1097
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480
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4500
gttttgaaaa tgtgtcgtc tttgtataac accaagcaga tgctgcctgc agaggggtgtg
4560
aaggagctgt gtctgctgct gcttaaccag tccctcctgc ttccatctct gaaacttctc
4620
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4680
acgggtgaatg attccaattg tgaccaagaa cttctttccc tgctcctgga tgccaagctg
4740
ctgggtgaagt gtgtctccac tcccttctat ccacgtattg ttgaccacct ctgggctagc
4800

ctccagcaag ggcgctggga tgcagaggag ctgggcagac acctgcggga ggccggccat
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 ttcagtacag cctccgcgc agcacagcac tgggtgtgag ggccacctgt ggccctgctc
 4980
 cttagcagaa aaagcatctg gagttgaatg ctgttcccag aagcaacatg tgtatctgcc
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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

Met	Val	Asp	Gln	Leu	Glu	Gln	Ile	Leu	Ser	Val	Ser	Glu	Leu	Leu	Glu
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Lys	His	Gly	Leu	Glu	Lys	Pro	Ile	Ser	Phe	Val	Lys	Asn	Thr	Gln	Ser
			20					25				30			
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
		35					40				45				
Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
	50					55					60				
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
65					70				75					80	
Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
			85					90				95			
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
		100						105				110			
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
		115					120					125			
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
		130				135					140				
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145					150					155				160	
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
			165					170					175		
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
		180						185				190			
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
	195					200					205				
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
	210					215					220				
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225					230					235				240	
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
			245					250					255		
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
		260						265				270			
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

275				280				285							
Gln	Ser	Glu	Gly	Tyr	Gln	Asp	Leu	Ala	Thr	Arg	Gln	Glu	Leu	Met	Ala
290				295				300							
Phe	Ala	Leu	Thr	His	Cys	Pro	Pro	Ser	Ser	Ile	Glu	Leu	Leu	Leu	Ala
305				310				315				320			
Ala	Ser	Ser	Ser	Leu	Gln	Thr	Glu	Ile	Leu	Tyr	Gln	Arg	Val	Asn	Phe
325				330				335							
Gln	Ile	His	His	Glu	Gly	Gly	Glu	Asn	Ile	Ser	Ala	Ser	Pro	Leu	Thr
340				345				350							
Ser	Lys	Ala	Val	Gln	Glu	Asp	Glu	Val	Gly	Val	Pro	Gly	Ser	Asn	Ser
355				360				365							
Ala	Asp	Leu	Leu	Arg	Trp	Thr	Thr	Ala	Thr	Thr	Met	Lys	Val	Leu	Ser
370				375				380							
Asn	Thr	Thr	Thr	Thr	Thr	Lys	Ala	Val	Leu	Gln	Ala	Val	Ser	Asp	Gly
385				390				395				400			
Gln	Trp	Trp	Lys	Lys	Ser	Leu	Thr	Tyr	Leu	Arg	Pro	Leu	Gln	Gly	Gln
405				410				415							
Lys	Cys	Gly	Gly	Ala	Tyr	Gln	Ile	Gly	Thr	Thr	Ala	Asn	Glu	Asp	Leu
420				425				430							
Glu	Lys	Gln	Gly	Cys	His	Pro	Phe	Tyr	Glu	Ser	Val	Ile	Ser	Asn	Pro
435				440				445							
Phe	Val	Ala	Glu	Ser	Glu	Gly	Thr	Tyr	Asp	Thr	Tyr	Gln	His	Val	Pro
450				455				460							
Val	Glu	Ser	Phe	Ala	Glu	Val	Leu	Leu	Arg	Thr	Gly	Lys	Leu	Ala	Glu
465				470				475				480			
Ala	Lys	Asn	Lys	Gly	Glu	Val	Phe	Pro	Thr	Thr	Glu	Val	Leu	Leu	Gln
485				490				495							
Leu	Ala	Ser	Glu	Ala	Leu	Pro	Asn	Asp	Met	Thr	Leu	Ala	Leu	Ala	Tyr
500				505				510							
Leu	Leu	Ala	Leu	Pro	Gln	Val	Leu	Asp	Ala	Asn	Arg	Cys	Phe	Glu	Lys
515				520				525							
Gln	Ser	Pro	Ser	Ala	Leu	Ser	Leu	Gln	Leu	Ala	Ala	Tyr	Tyr	Tyr	Ser
530				535				540							
Leu	Gln	Ile	Tyr	Ala	Arg	Leu	Ala	Pro	Cys	Phe	Arg	Asp	Lys	Cys	His
545				550				555				560			
Pro	Leu	Tyr	Arg	Ala	Asp	Pro	Lys	Glu	Leu	Ile	Lys	Met	Val	Thr	Arg
565				570				575							
His	Val	Thr	Arg	His	Glu	His	Glu	Ala	Trp	Pro	Glu	Asp	Leu	Ile	Ser
580				585				590							
Leu	Thr	Lys	Gln	Leu	His	Cys	Tyr	Asn	Glu	Arg	Leu	Leu	Asp	Phe	Thr
595				600				605							
Gln	Ala	Gln	Ile	Leu	Gln	Gly	Leu	Arg	Lys	Gly	Val	Asp	Val	Gln	Arg
610				615				620							
Phe	Thr	Ala	Asp	Asp	Gln	Tyr	Lys	Arg	Glu	Thr	Ile	Leu	Gly	Leu	Ala
625				630				635				640			
Glu	Thr	Leu	Glu	Glu	Ser	Val	Tyr	Ser	Ile	Ala	Ile	Ser	Leu	Ala	Gln
645				650				655							
Arg	Tyr	Ser	Val	Ser	Arg	Trp	Glu	Val	Phe	Met	Thr	His	Leu	Glu	Phe
660				665				670							
Pro	Phe	Thr	Asp	Ser	Gly	Leu	Ser	Thr	Leu	Glu	Ile	Glu	Asn	Arg	Ala
675				680				685							
Gln	Asp	Leu	His	Leu	Phe	Glu	Thr	Leu	Lys	Thr	Asp	Pro	Glu	Ala	Phe
690				695				700							
His	Gln	His	Met	Val	Lys	Tyr	Ile	Tyr	Pro	Thr	Ile	Gly	Gly	Phe	Asp

705					710					715				720
His	Glu	Arg	Leu	Gln	Tyr	Tyr	Phe	Thr	Leu	Leu	Glu	Asn	Cys	Gly
				725					730					735
Ala	Asp	Leu	Gly	Asn	Cys	Ala	Ile	Lys	Pro	Glu	Thr	His	Ile	Arg
			740					745					750	
Leu	Lys	Lys	Phe	Lys	Val	Val	Ala	Ser	Gly	Leu	Asn	Tyr	Lys	Lys
		755					760				765			
Thr	Asp	Glu	Asn	Met	Ser	Pro	Leu	Glu	Ala	Leu	Glu	Pro	Val	Leu
	770					775					780			
Ser	Gln	Asn	Ile	Leu	Ser	Ile	Ser	Lys	Leu	Val	Pro	Lys	Ile	Pro
785					790				795					800
Lys	Asp	Gly	Gln	Met	Leu	Ser	Pro	Ser	Ser	Leu	Tyr	Thr	Ile	Trp
				805					810					815
Gln	Lys	Leu	Phe	Trp	Thr	Gly	Asp	Pro	His	Leu	Ile	Lys	Gln	Val
			820					825					830	
Gly	Ser	Ser	Pro	Glu	Trp	Leu	His	Ala	Tyr	Asp	Val	Cys	Met	Lys
	835						840					845		
Phe	Asp	Arg	Leu	His	Pro	Gly	Asp	Leu	Ile	Thr	Val	Val	Asp	Ala
	850					855					860			
Thr	Phe	Ser	Pro	Lys	Ala	Val	Thr	Lys	Leu	Ser	Val	Glu	Ala	Arg
865					870				875					880
Glu	Met	Thr	Arg	Lys	Ala	Ile	Lys	Thr	Val	Lys	His	Phe	Ile	Glu
				885				890						895
Pro	Arg	Lys	Arg	Asn	Ser	Glu	Asp	Glu	Ala	Gln	Glu	Ala	Lys	Asp
			900					905					910	
Lys	Val	Thr	Tyr	Ala	Asp	Thr	Leu	Asn	His	Leu	Glu	Lys	Ser	Leu
	915						920					925		
His	Leu	Glu	Thr	Leu	Ser	His	Ser	Phe	Ile	Leu	Ser	Leu	Lys	Asn
	930					935					940			
Glu	Gln	Glu	Thr	Leu	Gln	Lys	Tyr	Ser	His	Leu	Tyr	Asp	Leu	Ser
945					950				955					960
Ser	Glu	Lys	Glu	Lys	Leu	His	Asp	Glu	Ala	Val	Ala	Ile	Cys	Leu
				965				970					975	
Gly	Gln	Pro	Leu	Ala	Met	Ile	Gln	Gln	Leu	Leu	Glu	Val	Ala	Val
			980					985					990	
Pro	Leu	Asp	Ile	Ser	Pro	Lys	Asp	Ile	Val	Gln	Ser	Ala	Ile	Met
	995						1000						1005	
Ile	Ile	Ser	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Asp	Leu	Gly	Gly	Pro
	1010					1015					1020			
Asp	Pro	Leu	Lys	Val	Leu	Glu	Gly	Val	Val	Ala	Ala	Val	His	Thr
1025					1030				1035					1040
Val	Asp	Lys	Gly	Glu	Glu	Leu	Val	Ser	Pro	Glu	Asp	Leu	Leu	Glu
				1045					1050					1055
Leu	Arg	Pro	Phe	Cys	Ala	Asp	Asp	Ala	Trp	Pro	Val	Arg	Pro	Arg
			1060					1065					1070	
His	Val	Leu	Gln	Ile	Leu	Gly	Gln	Ser	Phe	His	Leu	Thr	Glu	Asp
	1075						1080					1085		
Ser	Lys	Leu	Leu	Val	Phe	Phe	Arg	Thr	Glu	Ala	Ile	Leu	Lys	Ala
	1090					1095					1100			
Trp	Pro	Gln	Arg	Gln	Val	Asp	Ile	Ala	Asp	Ile	Glu	Asn	Glu	Glu
1105					1110				1115					1120
Arg	Tyr	Cys	Leu	Phe	Met	Glu	Leu	Leu	Glu	Ser	Ser	His	His	Glu
				1125				1130						1135
Glu	Phe	Gln	His	Leu	Val	Leu	Leu	Leu	Gln	Ala	Trp	Pro	Pro	Met
														Lys

```

          1140          1145          1150
Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
          1155          1160          1165
Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu
          1170          1175          1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
1185          1190          1195          1200
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
          1205          1210          1215
Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
          1220          1225          1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
          1235          1240          1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
1250          1255          1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
1265          1270          1275          1280
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
          1285          1290          1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
          1300          1305          1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
          1315          1320          1325
Leu Arg Ala Ala Gln His Trp Val
          1330          1335

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<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
120
ttgcgcacat agcgtttggt gcggctggca aggatatagg cgagtatcaa tgcacctgcg
180
agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttgcg
240
gcgattagcc gacgatcttc ttcaccagc aaactgttga tggtttttct gacgtcatcc
300
atctggcca
309

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<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

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Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp
  1           5           10          15
Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```

```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101
 <211> 540
 <212> DNA
 <213> Homo sapiens

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<400> 1101
gtcgacgtta ccaactacgt catgttggag tctggtcagc cgcttcatgc ctatgatgcc
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gacaacgtca gcgggacgat tgtggtccgt aaggccacg agggtgagca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcacttcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggaggc ctcccgcgc tttgagcggg gcgttgatcc gatttgcgcc
360
cataccgcag ccgttcgcgc agcgaattg ctcgcccagt acggcgggtgc caccgtcggt
420
gagccaccg tcgttggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcca actgaagagg tcatcgagat cttgacgcgt
540

```

<210> 1102
 <211> 180
 <212> PRT
 <213> Homo sapiens

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<400> 1102
Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```



```

      85              90              95
Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
      100              105              110
Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
      115              120              125
Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130              135              140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
145              150              155              160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165              170              175
Ile Leu Thr Arg
      180

```

<210> 1103

<211> 537

<212> DNA

<213> Homo sapiens

<400> 1103

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cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcagggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaacca ggtgatcttt ccctcgccat agattgacgt ggcattctcg tcggagtga
180
tcaagcagcg cttaggcagc tgctgggccc ggggcttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgccgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgcggc ggcaccccga tcgtcccttg tccgcatggg tctccccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaaac
480
cgggggccaa gccgggcccc aaccatggga tcaaccggat gtccgtacat cagcgct
537

```

<210> 1104

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1104

```

Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
1      5      10      15
Arg Phe Gly Ala Met Gly Ser Gly Ala Met Gly Phe Phe Leu Cys
20     25     30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
35     40     45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
50     55     60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```

```

65              70              75              80
Gly Ala Ala Glu Gly Val Pro Gly Leu Gly Gly Tyr Leu Arg Glu Gly
              85              90              95
Phe Val Cys Ser Gly Glu Leu Gly Glu Ala Ala Gly Pro Ala Ala Ala
              100              105              110

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<210> 1105
 <211> 448
 <212> DNA
 <213> Homo sapiens

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<400> 1105
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tggggtgggc ccttccgagg ctgcctccag gacctgcgac tcgatggctg ccacctcccc
120
ttctttcttc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtcc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtctgaccc ctgtttcaat
240
ggtgggactt gcctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgccagca gctgtggtgt cccggccagc cctgtctccc acctgccacg
360
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420
ccgcccgcgt tcagcgggca caacgcgt
448

```

<210> 1106
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 1106
Arg Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu Ala Thr
1      5      10      15
Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln Asp Leu
20     25     30
Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu Asp Asn
35     40     45
Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
50     55     60
Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
65     70     75     80
Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
85     90     95
Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
100    105    110
Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
115    120    125
Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
130    135    140
Ser Gly His Asn Ala

```

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg
 120
 agaacctcga agagcgcgtc gccacgcgca cacaggcgct ggctgaagcc aaccaacgcc
 180
 tggcaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggccgggcg cagcgacgaa
 360
 atcggcgcgc ttactgacgc cgcggtatcg tccgcccata gcgcggccgc cctcaccat
 420
 cggtctgtgg cgttctcgcg ccgccagtcg ctggccccc gcccgctgga cccaaccag
 480
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa
 540
 gtgcaactgg gccgcgatat ctggcccgctg aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1				5					10					15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20					25					30		
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
		35				40						45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
	50					55					60				
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
65					70				75					80	
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
				85				90						95	
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105					110		
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
		115					120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

```

      130              135              140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly
145              150              155              160
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala
      165              170              175
Leu Leu Asn Leu Ala Ile
      180

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<210> 1109
 <211> 325
 <212> DNA
 <213> Homo sapiens

```

<400> 1109
accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
60
agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccttggatca ggtgcccgat
120
cccgttttcg ccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa
180
ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
240
atcacgaccc cggaaggcat cgagggttctg gtccatatcg gactggatac cgtgatgctg
300
cgcggcgaca gctatccccc ccccn
325

```

<210> 1110
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1110
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
1      5      10      15
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
      20      25      30
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
      35      40      45
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
50      55      60
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
65      70      75      80
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
      85      90      95
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
      100      105

```

<210> 1111
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaaacgccg tggcgaattc
 120
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccgggtgc tagaacaccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacgggtca agctt
 385

<210> 1112

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1112

Xaa	Arg	Val	Ala	Pro	Val	Arg	Leu	Ala	Val	Gly	Glu	Glu	His	Asp	Leu
1				5				10						15	
Thr	Glu	Leu	Ala	Thr	Glu	Leu	Val	Asn	Ala	Ala	Tyr	Ser	Arg	Val	Asp
			20					25					30		
Met	Val	Glu	Arg	Arg	Gly	Glu	Phe	Ala	Val	Arg	Gly	Gly	Ile	Val	Asp
		35					40					45			
Val	Phe	Pro	Pro	Val	Leu	Glu	His	Pro	Val	Arg	Ile	Asp	Phe	Phe	Gly
	50					55					60				
Asp	Glu	Ile	Glu	Glu	Met	Thr	Ser	Phe	Ala	Val	Ala	Asp	Gln	Arg	Ser
65					70					75				80	
Thr	Asp	Glu	Thr	His	Gln	Glu	Leu	Ile	Cys	Ala	Pro	Cys	Arg	Glu	Leu
				85					90					95	
Ile	Leu	Thr	Asp	Glu	Val	Arg	Ser	Arg	Ala	Lys	Ala	Leu	Leu	Thr	Asp
			100					105					110		
His	Pro	Glu	Leu	Ala	Asp	Met	Leu	Glu	Arg	Ile	Gly	Asn	Gly	Gln	Ala
		115					120					125			

<210> 1113

<211> 400

<212> DNA

<213> Homo sapiens

<400> 1113

nnncgaccga tgagcgatcg cgaaccgcgc aacctgggat acccctacgt cgagtctttc
 60
 cactcggact tctcggggac cggcggagtc gatcagaccg accgtttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcctcgcgtt acccggactc ccgttcggcg
 180
 ttgctgccga tcttgcacct ggttcagtcg gtggacggac gcatctcgcc ggctcgttatt
 240
 gagactgcgg ctgaagtgcg cggcattacc accgccagg tatccggggg ggcgaccttc
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggg
 60
 tccctgcccc gcacccccga gctgatcgag gccaatcgtg cgcgccgtga gggttcgctc
 120
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcgttgt gaagcgtcag
 180
 gctgagattg gcttgatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtggtg gacgtattcc atctctcggt tcggcgggct gtcctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
 20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
 35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
 50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
 65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
 85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
115          120          125
Gln Arg Phe Arg Thr Arg
130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tggcgcgga cccgctggct
60
gacccctacc tgctaggtgt atcggtggc gcaagtgtgg gagcaaccgc agtcacgct
120
ttggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct tgtaggggccc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgcggggcgt ggtgttgctc tcggcgttct cgcgttggcg agtttctcg
300
tctttcg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
 20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
 35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 1119
cgcgctccttg agatgcttga gcaggctcggg attgaggatc cagccagggt gatggattcc
60
taccgccttc aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttggaagt cacggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attaccacag atttggcggg tgcctcgac atctgccggg agcttatcgt gatgacgtcg
300
ggcaaggctg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1      5      10      15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20      25      30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35      40      45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50      55      60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65      70      75      80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85      90      95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100      105      110
Leu Ser His Pro Asp
      115

```

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121
 tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
 60
 cccagggcac ggtgttcac cgcacctga cgatgatgaa aggcgtcgcc gcgaatctca
 120
 ccgcagcggg cgttcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc
 180
 atgcgcggg cgttccggg ctggccggca ccgacgccta catcgggtcc ttcacacggg
 240
 catcgcgcgc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac
 300
 gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg
 360
 gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
 406

<210> 1122
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1122
 Met Leu Ala Gln Gly Thr Val Phe Ile Pro Thr Leu Thr Met Met Lys
 1 5 10 15
 Gly Val Ala Ala Asn Leu Thr Ala Ala Gly Val Pro Gly Val Ser Tyr
 20 25 30
 Ala His Ala His Glu Ser Thr Arg Ala Met His Ala Ala Gly Val Pro
 35 40 45
 Val Leu Ala Gly Thr Asp Ala Tyr Ile Gly Ser Phe Thr Arg Ala Ser
 50 55 60
 Pro Pro Tyr Gly Glu Ser Met His Asp Glu Asp Ala Tyr Ile Gly Leu
 65 70 75 80
 Leu Glu Arg Ala Met Pro Pro Tyr Gly Glu Ser Met His Asp Glu Leu
 85 90 95
 Ala Leu Leu Val Asp Ala Gly Leu Ser Thr Ala Glu Ala Leu Arg Ala
 100 105 110
 Ala Thr Ser Thr Gly
 115

<210> 1123
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 1123
 gccggcgatg cgttcattaa ggcctaagat gcgccgacgc ctccccgctt tctcgcctt
 60
 gcctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
 120
 aagcgaatgc tccccgttg atattgcgc agtgccgag gccctgcgc attcgtcgc
 180
 taaggcgaag ctgcaccgc actccaccaa cgaggatgaa cactcctttt ccatgctcta
 240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc
 300
 acccgctctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1124
 Met Arg Ser Leu Arg Pro Lys Met Arg Arg Arg Leu Pro Ala Phe Leu
 1 5 10 15
 Ala Leu Ala Ser Thr Ala Leu Ala Ala Gly Met Val Gly Cys Ser
 20 25 30
 Ser Glu Gly Ala Ser Pro Ser Glu Cys Ser Pro Val Asp Ile Ala Ala
 35 40 45
 Val Arg Glu Ala Leu Pro His Ser Leu Ala Lys Ala Lys Leu Asp Pro
 50 55 60
 His Ser Thr Asn Glu Asp Glu His Ser Phe Ser Met Leu Tyr Arg Ala
 65 70 75 80
 Gln Asp Lys Glu Gln Val Ser Leu Leu Gly Thr Lys Tyr Glu Ala Asp
 85 90 95
 Gly Ala Pro Val Cys Pro Asp Asp Pro Asn Glu Ala Ala Arg
 100 105 110

<210> 1125
 <211> 555
 <212> DNA
 <213> Homo sapiens

<400> 1125
 nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgccggtt ctgcgaaatc gagcatttcg
 360
 gatactggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcggggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcaactcgctt cggaagtggg cgtacccggg ttcaccgacc tggatgaaggc gatcgagtcg
 180
 accgctccgg acgcccgggt catcgccacg cgggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgcccgcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgccgaag cgatcgtgct ccgcgctgaa cgggcccggc tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
      65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

```

<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttcaggga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgctg ggccaacaca cgctcacaga gaagtttgtc
180
tgccctggatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tccctgggct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

```

<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Ala Glu
35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
100      105      110

```

<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc
 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccgataa cccgtatgtg
 120
 ctcggcccgc acgtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga
 240
 cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtagtcgacg aagccgccgc agaccgtacc gtgcatccag gcgcgggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcagggtgga actgacagag
 600
 caagttgttg ggtatctgcy tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

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acgcgtgaag ggggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
60
tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcttc
120
tgtctgtctt ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcttg tcctaacccc actggcatct tacactctgg gagatagctt cccctgaga
240
ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
300
agtcaggtag agtatttttt cttttaaaag atcattgata acataataag gtttgtcata
360
gtccttaata acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgagc
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc cagggaacct cgggggactc tggacgctct ttgtctgccc
540
ttccttttcc ctacactcgc tccccgtga gaaagtgggg ctcatgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tggatgattt ttctctctct
660
ttctetaatg gaataattgt ttctgtctac acttctttat tttctcctct ctacagctgc
720
cttctaaaaa tgtgcttttc tgttcttgca gaactgaagc ttgcatggcc tttgtgtgta
780
cttcccttc acgcgt
796

```

<210> 1134

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1134

```

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130          135          140
Gln Trp Gly
145

```

<210> 1135

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1135

```

gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgtcgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgacccgctc tgctccccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtccctg ctgctaacca cccttggttg
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

```

<210> 1136

<211> 67

<212> PRT

<213> Homo sapiens

<400> 1136

```

Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
 1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50 55 60
 Asn Tyr Arg
 65

<210> 1137
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1137
 acgcgtcgct ggaacccgaa gatgaagcgc ttcattcttca ccgagcgcaa cggatatctac
 60
 atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
 120
 actgtcgcca agggcgccca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
 180
 atcgttgagc aggccactcg cgttggcatg ccctatgtca accagcgttg gcttggggga
 240
 atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
 300
 atggactttg acaaggtttc cggctccggt ctcaaccaaga aggagctgct tatgctc
 357

<210> 1138
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1138
 Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
 1 5 10 15
 Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
 20 25 30
 Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
 35 40 45
 Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
 50 55 60
 Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
 65 70 75 80
 Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
 85 90 95
 Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
 100 105 110
 Lys Lys Glu Leu Leu Met Leu
 115

<210> 1139
 <211> 456
 <212> DNA
 <213> Homo sapiens

<400> 1139
 gtgcacaggt cgtctgaggg catgccgcgg acgatcgatc cgagtatggc ggcaccttca
 60

ccaatcccggt aggaccggtc tcgtccagca tcgaccaagg cgctgttgag gcgttcgggt
 120
 tcggtaaatga actcgatgag ctcaatatcc acgggggtag cgaaatcgta gatcttggcc
 180
 agactgaggc cttggaggag cgcggccggtc ggggggacgt ggctcgggc cgggcgttcc
 240
 ttgctctcaa ggacttcgtc gtcgcggtc acaaggaata cgtttggtg gtcgcctgca
 300
 atgcatgtc gagcgtggtg accatcgagg tgaaggacgg ttccggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgtc ggccaggacc gctagc
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
			20					25					30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
		35					40					45			
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
		50				55					60				
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65					70					75				80	
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
			85						90					95	
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
			100					105						110	
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcggggt ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggctgttggt ttctggtgct gttgttccgt
 120
 ccgaccggca ttctgggccc tccggagggt gagaaagtat gagcagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtgggccc tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttcttgccg tgetgtttac ccagcaagtc ggtg
354

<210> 1142

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1142

Gly	Ala	Met	Leu	Gly	Gly	Leu	Val	Leu	Gly	Val	Ala	Glu	Ala	Phe	Gly
1				5				10				15			
Ala	Asp	Ile	Phe	Gly	Asp	Gln	Tyr	Lys	Asp	Val	Val	Ala	Phe	Gly	Leu
			20					25				30			
Leu	Val	Leu	Val	Leu	Leu	Phe	Arg	Pro	Thr	Gly	Ile	Leu	Gly	Arg	Pro
			35				40					45			
Glu	Val	Glu	Lys	Val											
			50												

<210> 1143

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1143

acgcgttgca catccccag gaccatcaac cgccgcattg ccgcatagac ctggagatcc
60
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa ggcgaggcgc gaccaaccga gggtaggctca acagcgccgc
180
attcgaaatc ctggccccag tggccgtcaa tgcccaacac tacgcgctct ccgagagacc
240
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatcgccaag aaggccgcga accacaccat gcatcccgcc aggcagtoga ttt
353

<210> 1144

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1144

Met	His	Gly	Val	Val	Arg	Gly	Leu	Leu	Gly	Asp	Arg	Gly	His	Val	Val
1				5				10				15			
Leu	Val	Val	Ala	Arg	Leu	Glu	Ala	Leu	Gly	Glu	Leu	Leu	Gln	Arg	Arg
			20					25				30			
Ser	Leu	Gly	Glu	Arg	Val	Val	Leu	Gly	Ile	Asp	Gly	His	Val	Gly	Gln
			35				40					45			
Asp	Phe	Glu	Cys	Gly	Ala	Val	Glu	Pro	Pro	Ser	Val	Gly	Arg	Ala	Cys
			50			55					60				
Ala	Cys	Cys	Val	Val	Gly	Cys	Ala	Asp	Glu	His	Arg	Leu	Gly	Leu	Cys
65					70				75					80	
Leu	Asp	Arg	Phe	Glu	Leu	His	Phe	Thr	Leu	His	Gly	Ile	Ser	Arg	Ser

Met Arg Gln Cys Arg Gly
100

85

90

95

<210> 1145

<211> 360

<212> DNA

<213> Homo sapiens

<400> 1145

gtcttcggcg ggctcggcct gttctattgc gtcattgaccc cgggtgtactg gttctcggcc
60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatggtgttt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc
240
tggtgcgcgc tcgttgctgc catcatgtgc ctccggcccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcggggtt gggcttttga gtactaccgc
360

<210> 1146

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1146

Val	Phe	Gly	Gly	Leu	Gly	Leu	Phe	Tyr	Cys	Val	Met	Thr	Pro	Val	Tyr
1				5					10					15	
Trp	Phe	Ser	Ala	His	Glu	Val	Ala	Gly	Thr	Trp	Val	Leu	Gly	Leu	Ser
			20					25					30		
Ala	Ala	Met	Ala	Leu	Met	Val	Phe	Phe	Tyr	Val	Gln	Val	Ile	Ala	Lys
		35					40				45				
Lys	Ile	Asn	Pro	Arg	Pro	Ser	Asp	Glu	Lys	Asp	Ala	Glu	Val	Ile	Asp
	50					55				60					
Gly	Ala	Gly	Pro	Val	Gly	Phe	Phe	Pro	Pro	Gln	Ser	Ile	Trp	Pro	Phe
65				70					75					80	
Trp	Cys	Ala	Leu	Val	Val	Ala	Ile	Met	Cys	Leu	Gly	Pro	Ile	Phe	Gly
			85					90					95		
Trp	Trp	Ile	Ser	Leu	Leu	Gly	Leu	Gly	Ile	Val	Ile	Trp	Ala	Ala	Ser
			100				105						110		
Gly	Trp	Ala	Phe	Glu	Tyr	Tyr	Arg								
		115					120								

<210> 1147

<211> 409

<212> DNA

<213> Homo sapiens

<400> 1147

tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa
60

gcaaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtggaaca tgatgagggt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctggatcatca gtacacatag aatctgatn
 409

<210> 1148

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1148

Met	Gln	Ser	Gly	Leu	Leu	Lys	Val	Met	Ile	Val	Ala	Lys	Asn	Ile	Glu
1				5					10					15	
Ala	Lys	Lys	Ala	Ser	Thr	Phe	Phe	Ile	Asn	Pro	Glu	Leu	Ile	Met	Leu
			20					25					30		
Met	Pro	Val	Gly	Gly	Ser	Leu	Cys	Ala	Leu	Gln	Ile	Gly	Arg	Gly	Ser
		35					40					45			
Leu	Leu	Ser	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Ser	Pro	Leu	Ser	Ser	Leu
		50				55					60				
Leu	Ser	Ile	Pro	Arg	Ala	Val	Glu	His	Asp	Glu	Val	Leu	Phe	Pro	Ser
65				70					75					80	
Trp	Ile	Ser	Ser	Phe	Cys	Pro	Pro	His	Lys	Gly	Ala	Leu	Met	Asp	Leu
				85				90					95		
Gln	Glu	Trp	Asp	Ala	Phe	Pro									
			100												

<210> 1149

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1149

gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc
 60
 cgtgaggcgg tatcgcagat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt
 120
 gacgtgggcc gtgtactggg tcacccttat ggcttcgtcg atcgcattct caagctgggtg
 180
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1150
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1 5 10 15
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
 20 25 30
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
 35 40 45
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
 50 55 60
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
 65 70 75 80
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
 85 90 95
 Lys Leu Gly Arg Val Thr Arg
 100

<210> 1151
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1151
 gcgcgcattt tttgcaacct aagcgacgtc attatggccg agtcgccggc ttatgtcggg
 60
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
 120
 ggggttggttc cggaatccct gcgtgagaaa gtgactgcag cgcgtaaga cggcaagtcg
 180
 gtgaagttcc ttacacggt tctaactac tcgaaccgt cggaatctc gcaatccacc
 240
 gagcgtcgcc gggagatcct agcgggtggc gacgagctgg atctgttggt ggttgaggac
 300
 aaccgcgtacg gggtactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat
 360

<210> 1152
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1152
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1 5 10 15
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
 20 25 30
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
 35 40 45
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
 50 55 60
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

```

65          70          75          80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
      85          90          95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
      100          105          110
Leu Pro Thr Leu Lys Ser Met Asp
      115          120

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<210> 1153
 <211> 416
 <212> DNA
 <213> Homo sapiens

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<400> 1153
gcgtggattc gtccctggcgg cgctcgtacc gacctgcccg agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccg cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactggtcc tgcctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccctt attgcgatta cgacacgtat gacttcgacg tcgccacctg ggataacctg
300
gactgttacg ggcgtttccg catccgcctg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 1154
Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
      20      25      30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
      35      40      45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
      50      55      60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65      70      75      80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
      85      90      95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
      100      105      110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
      115      120      125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
      130      135

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<210> 1155

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1155

cttaagttat tttggtcttt gcctctctcc tcaggttggt aagattacag aaatctggga
 60
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacccaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgto ttctaccagg gtccaccttt aacctggtt atctgaaaat tttccccctg
 240
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatttttt ttcacgcgt
 339

<210> 1156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1156

Met	Gly	Arg	Phe	Ser	Ala	Leu	Ser	Arg	Lys	Thr	Ala	Val	Lys	Met	Ala
1				5					10					15	
Thr	Lys	Thr	Ser	Arg	Arg	Thr	Gly	Gly	Phe	Gly	Glu	Thr	Ala	His	Phe
			20					25					30		
Arg	Ala	Val	Gln	Cys	Arg	Ala	Phe	Arg	Leu	Leu	Pro	Gly	Ser	Thr	Phe
		35					40					45			
Asn	Thr	Val	Tyr	Leu	Lys	Ile	Phe	Pro	Leu	Ala	Tyr	Ser	Leu	Ala	Ala
		50				55					60				
Ala	His	Phe	Ala	Glu	Arg	Trp	Arg	Ser	Asp	Leu	Tyr	Ala	Pro	Cys	Ser
65					70				75					80	
Phe	Arg	Asp	Ser	Ile	Val	Phe	Phe	Phe	Thr	Arg					
				85					90						

<210> 1157

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1157

nnacagcctc tctccgaccc ggcggcggtt gcacacgtcc ccgtctgagg agtattcgtg
 60
 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttgcgcca aatcgcggtc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcag
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag
 300

gtggcgatgg gaatggggccg tgacgttcgc gacgccatct tcacccgcac ccttgacttc
 360
 tcggccccggg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac
 420
 gtccag
 426

<210> 1158
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1158
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
 1 5 10 15
 Val Ala Val Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
 20 25 30
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
 35 40 45
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
 50 55 60
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
 65 70 75 80
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
 85 90 95
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
 100 105 110
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
 115 120

<210> 1159
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1159
 tctctccgac cgcgcctggg gcccggtggg gtccctgcggg gacgcgggcg aggacggcgc
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctct gccacgggaa
 120
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag
 180
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt
 240
 ccgccaggac ccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca
 300
 gtgccacagc cttctcaagt ccttctgca gagggtcaac gcctccccgg ctggtcgccg
 360
 gaagccttgt gcaaaggctg gtgccagcc cccaacaggg gcagaggagg gagcgtgtct
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gccacagagg acggccagtc agcatgcagc caatacaccc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcgttt
 180
 atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg
 240
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

```

      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

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<210> 1163
 <211> 466
 <212> DNA
 <213> Homo sapiens

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<400> 1163
ngcgcgccag gaagcgggag gtcagctgta cacccagggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccg tcacctcggc tctgccagag gggaaaaaatg ctgtctttcg ggctgtggtc
240
tgtggggagc ccaggcccgga ggtgcgttgg cagaactcca aaggtgacct cagtgattcc
300
agcaagtaca agatctcttc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164
 <211> 127
 <212> PRT
 <213> Homo sapiens

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<400> 1164
Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1      5      10      15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
      20      25      30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
      35      40      45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
      50      55      60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65      70      75      80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
      85      90      95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
      100      105      110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
      115      120      125

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<210> 1165

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1165

tgggtggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc
 60
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga
 180
 ttccccgccg ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggcc acacttctgg
 360
 gaactgggtca tcggcggtaca gcttttcttc ctgccttcta atctcatgga agcc
 414

<210> 1166

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1166

Trp	Val	Val	Pro	Asp	Thr	Xaa	Asn	His	Val	Leu	Asn	Arg	Ile	Ser	Gly
1			5						10					15	
Met	Val	Lys	Gly	Cys	Phe	Ser	Lys	Val	Leu	Val	Glu	Pro	Arg	Leu	Leu
			20					25					30		
Lys	Leu	Asn	Leu	Thr	Ile	Met	Cys	Leu	His	Ile	Leu	Leu	Met	Ser	Thr
			35				40						45		
Phe	Val	Ala	Leu	Pro	Gly	Gln	Leu	Ala	Ala	Ala	Gly	Phe	Pro	Ala	Ala
			50			55					60				
Glu	His	Trp	Lys	Val	Tyr	Leu	Val	Thr	Met	Leu	Ile	Ser	Phe	Val	Ser
65					70					75				80	
Val	Val	Pro	Phe	Ile	Ile	Tyr	Ala	Glu	Val	Lys	Arg	Arg	Met	Lys	Arg
				85					90					95	
Val	Phe	Leu	Thr	Cys	Val	Ala	Leu	Leu	Leu	Ile	Ala	Glu	Ile	Val	Leu
			100					105					110		
Trp	Gly	Ser	Gly	Pro	His	Phe	Trp	Glu	Leu	Val	Ile	Gly	Val	Gln	Leu
		115					120					125			
Phe	Phe	Leu	Ala	Phe	Asn	Leu	Met	Glu	Ala						
		130				135									

<210> 1167

<211> 464

<212> DNA

<213> Homo sapiens

<400> 1167

gtcgaccccg tgggcaagag tcgcggcccc tgacgataac ttcaccccg cggccttgag
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccattctcgg caaaccagtg cgcagttgtg tggatgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgccctg acggccaccc ccgaccagc
 300
 ccgcacgccc agggcgtacc catcggtcat cgcgtcgcgg acgatgggta ccaggtcgtg
 360
 gcattcctgc gcggtgtggc ttgcacgca tcgacgcagg aagtcagcct cgtcccgga
 420
 cagggttcc ttactaagtt ccgcggtttt ctttcccgac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5				10					15		
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20					25					30			
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
	35					40					45				
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50				55					60					
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70				75					80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85				90						95		
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
		100					105						110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctggtcgg ggacagcctc
 60
 ctagagcctt tctggccaat gggaaacagga atagcccggg gctttctagc tgctatggac
 120
 tctgcctgga tggtcogaag ttggtctcta ggaacgagcc ctttgaagt gctggcagag
 180
 agggaaagta tttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaacgtg
 480
 acagat
 486

<210> 1170
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1170
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser
 1 5 10 15
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe
 20 25 30
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly
 35 40 45
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu
 50 55 60
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr
 65 70 75 80
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu
 85 90 95
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp
 100 105 110
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys
 115 120 125
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp
 130 135 140
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp
 145 150 155

<210> 1171
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1171
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggcagcgcca ggtgctggcg ctgcccagagg ccccgctgcca agtggggccc atagcagccg
 120
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccctccaa gactacaacc tctgtctgat gaaaaacaaa cgacccagag aggagggcagc
 300
 tgccgggaca ctgcaggctg ggcccgcgcg gcccttggag ggcagggtcaa aatcccggaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg ggggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcggtcaatg acgacggcga gcattctgcc gagcaggtga tgcgagccac ccgcggtgct
60
ggacttggggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctccggctcag aaagtccgta ccctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgtc gtgtcaccgg ccacgccaac gactgccttc
240
cggctggggtg agcgtactgc tgacccgatg gcgatgtacc gtcctgatct atgcacggtc
300
ccggccaata tggccggaag tcccgcagga tctttccga tcgggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

```

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1           5           10           15
Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
          20           25           30
Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
          35           40           45
Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
          50           55           60
Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
65           70           75           80
Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
          85           90           95
Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
          100          105          110
Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
          115          120          125
Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
          130          135          140
Leu
145

```

<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

```

gategcactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
60
caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat
120
cgctgggtaa gtcggagtg cactgcacag cgcaggaaag gacgccttcg ccagcattct
180
gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttta
240
ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
300
aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
360
gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc
420
ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
480
ggcttgcagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac
540
agagaagaga accaagagcc ccttgcagaa tcaccagttg cctcgggacc agaaagaaaa
600
aaatctgact caggagttat gttgccaacg ctcagggtct ctcttattca ggacatgagg
660
catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
720
ctgtctcta
729

```

<210> 1176

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1176

```

Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1           5           10           15
Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
          20           25           30
Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
          35           40           45
Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
          50           55           60
Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
65           70           75           80
Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
          85           90           95
Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
          100          105          110
Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
          115          120          125
Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
          130          135          140
Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
145          150          155          160
Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
          165          170          175
Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
          180          185          190
Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
          195          200          205
Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
          210          215          220
Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
225          230          235          240
Leu Ser Leu

```

<210> 1177

<211> 581

<212> DNA

<213> Homo sapiens

<400> 1177

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acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
60
cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa
120
gctcctcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
180
cgtcgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc
240

```



```

cgatgagggc gtcgtcgaat ccagcgatga tcgataacct tctcggtagc acgtccgtgg
300
ccaacaggtg gtcgacttg gggggggcta gccatgtaat tgttccgagc acatggaggg
360
tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
420
cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
480
cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg
540
ggctttcacc ggcagagatc atgggtgtgga ccaccattgt g
581

```

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<210> 1178
<211> 192
<212> PRT
<213> Homo sapiens
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<400> 1178
Met Val Val His Thr Met Ile Ser Ala Gly Glu Ser Pro Glu Lys Trp
  1              5              10              15
Thr Cys Asp Leu Gln Ala His Gly Val Thr Ala Ser Gly Arg Phe Val
              20              25              30
Val Ala Gln Arg Ser His Pro Ala Gln Ala Leu Cys Gln Val Pro Ala
              35              40              45
Gly Leu Pro Thr Asp Val Arg Leu Lys Ile Ser Lys Asp Ala Pro Glu
  50              55              60
Pro Ala Ile Arg Leu Leu Ala Ala Thr Leu His Val Leu Gly Thr Ile
  65              70              75              80
Thr Trp Leu Ala Pro Ala Gln Val Asp His Leu Leu Ala Thr Asp Val
              85              90              95
Leu Pro Arg Glu Val Ser Ile Ile Ala Gly Phe Asp Asp Ala Leu Ile
              100              105              110
Gly Val Val Ala Pro Tyr Arg Ala Ile Leu His Asp Ala Met Gly Ser
              115              120              125
Thr Glu Ile Asp Val Pro Ala Leu Ile Asp Asn Ile Pro Asp Asp Lys
  130              135              140
Val Phe Pro Ser Ala Glu Asp Glu Leu Ser Ala Leu Asp Ile Val Ala
  145              150              155              160
Ser Leu Gly Asn Ala His Leu Ser Gln Leu Cys Asp Gly Val His Lys
              165              170              175
Lys Thr Val Phe Gly Cys Ser Cys Trp Ser Arg Ala Thr His His Ala
              180              185              190

```

```
<210> 1179
<211> 597
<212> DNA
<213> Homo sapiens
```

```
<400> 1179
gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgagggtg ctctgtgct
60
gattgggggt tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
120
```

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc tttcagttcc ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaataca ggctatggga cgccagaggc agcgtcctgg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttctcat ggacccagca tgggtggacgt
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc
 420
 agagtctcat aggaagatgc atggtccaca caacagtgag tcggcaggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtcccatt
 540
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1				5					10					15	
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
			20					25					30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
		35				40						45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50				55						60				
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
65				70					75					80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85					90						95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
			100					105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgtttc cccgcgtcag atggtctccg tggctactgc catgattccg
 60
 ttctctgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgccgtgc tgcgttcgga ggctccgttc gtcggtaccg gtatggagca gcgtgctgct
 180
 tacgacgccg gcgatgtcat tgcgcttcg gccacaggtg tggctgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagtgc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35				40						45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55					60				
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65				70						75				80	
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
			85					90						95	
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105						110	
Pro	Leu	Leu	Thr	Arg											
			115												

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gattccttctg ggcgctggtc caagcgcgtg gtgaggccgt cctctcctgc agaaccgccg
60
cctcttcgcc cctgcccgc cactgttct gtctctctca cctctccag gaagcctgcc
120
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcgt
180
ggctcctgga ggccaggcca cgtcctcctc cctctgggt gagtgagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc
300
gtccaggctc gtctgggct ggetgagagg aggaggttg cctcgcgcg ccatgtgcgt
360
gacagtggag acatcgccag cctctgctt gcacagctga cggcagcccc tctctctcca
420
gcatgtccc ca
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1184

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Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1           5           10           15
Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
      20           25           30
Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
 35           40           45
Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
 50           55           60
Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
65           70           75           80
Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
      85           90           95
Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
      100           105           110
Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu
      115           120           125
Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
      130           135           140

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<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

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accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
60
gaattacgcg gcaaatatgt attgttgggt gaagggtgtac ggggctctct atctaaacaa
120
gtcatcaata aataccaatt atccgagggt catgaaccac aaaagtctcg ccttggctta
180
aaagaaattt gggaaataga cccagaaaaa cacaaagaag gcagagtcag tcataccatg
240
ggctggccat taaatggcaa tgctggcggc gggtctttta tttatcatgc agaaaacaat
300
caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccttac
360
caagaatttc aacgctttta acaccatccg attatcgcg agctattaac tggcggtaaa
420
cgc
423

```

<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

```

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1           5           10           15
Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
      20           25           30
Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```

```

      35              40              45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
      50              55              60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
65              70              75              80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85              90              95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100              105              110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115              120              125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130              135              140

```

<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

```

acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagacgaa ttcaggggct
60
aagggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtaccactg ctogaatttc tctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcaggttta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

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<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

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Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
1              5              10              15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
      20              25              30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
      35              40              45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
      50              55              60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
65              70              75              80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
      85              90              95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

```

	100		105		110										
Thr	Tyr	Gln	Val	Tyr	Ala	Thr	Val	Asp	Gly	Lys	Ser	Thr	Asp	Asp	Thr
	115		120		125										
Gly															

<210> 1189

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1189

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tcgatcgccg accgcccggg ccttgccccc ggcacgatcg gtggcctggt ggccagcacc
60
ctgggtgctg gtttcattgg cggcatcggt gcagggttttc tggccgggta cagcgccaag
120
gccattgccc gctgggcacg gctgcccagc agcctggatg cgctcaaacc gattctgatc
180
atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg
240
gtggcggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
300
attctcctgg gcntgttgct cggcggctag
330

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<210> 1190

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1190

Ser	Ile	Ala	Asp	Arg	Pro	Gly	Leu	Ala	Pro	Gly	Met	Ile	Gly	Gly	Leu
1			5						10				15		
Leu	Ala	Ser	Thr	Leu	Gly	Ala	Gly	Phe	Ile	Gly	Gly	Ile	Val	Ala	Gly
		20						25					30		
Phe	Leu	Ala	Gly	Tyr	Ser	Ala	Lys	Ala	Ile	Ala	Arg	Trp	Ala	Arg	Leu
		35					40					45			
Pro	Ser	Ser	Leu	Asp	Ala	Leu	Lys	Pro	Ile	Leu	Ile	Ile	Ser	Leu	Leu
		50				55					60				
Ala	Ser	Leu	Phe	Thr	Gly	Leu	Val	Met	Ile	Tyr	Val	Val	Gly	Gln	Pro
65					70					75				80	
Val	Ala	Ala	Met	Leu	Gly	Gly	Leu	Thr	His	Phe	Leu	Asp	Ser	Met	Gly
			85					90					95		
Thr	Thr	Asn	Ala	Ile	Leu	Leu	Gly	Xaa	Leu	Leu	Gly	Gly			
			100					105							

<210> 1191

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1191

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cggccgacga tgtgcggtga gcaagagatt tggagagcca tgatgacgtc agcagacaaa
60

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gcagggacta acggacagac catgcagaca ccgccggtgg tgcgccgca ggactgggag
 120
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccg cgacgcactc
 180
 gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
 240
 ccttcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
 300
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5					10					15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
		35					40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65				70					75					80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala
		100					105						110		

Cys Arg

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catctttagt ctcttctttc tctacactna ggttgctccc
 60
 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact
 120
 cccagcctcc tggccccttc tgtacatgat ttcccttggt gccactccat gcatttttct
 180
 tggctcagga cttagtgggc ctccatggga ctgggtacct ctacttggtc ccttctggaa
 240
 tctgtaactt tgtgttcccc accattcttt cctttatgaa ccgatggtgc aacagcatga
 300
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
 360
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga
 420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 ttcccagccc ctacaggtgt atacagcaca aagggagggg cccctagtgt tggtgtcac
 660
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggcccc
 720
 ag
 722

<210> 1194

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1194

Met	Val	Gln	Gln	His	Asp	Tyr	Leu	Lys	Phe	Leu	Val	Thr	Pro	Ser	Cys
1				5					10					15	
Phe	Ser	Gly	Gly	Lys	Met	Pro	Thr	Ala	Gln	Glu	Ile	Val	Leu	Pro	Phe
		20						25					30		
Glu	Arg	Gly	Gln	Gly	Met	Gly	Ala	Cys	Pro	Glu	Lys	Gly	Asp	Gly	Leu
		35				40						45			
Met	Lys	Gly	Gly	His	Ser	Ala	Arg	Glu	Glu	Gly	Ala	Arg	Thr	Leu	Ser
	50				55					60					
Val	Leu	Phe	His	Glu	Glu	Asp	Tyr	Val	Gly	Val	Cys	Ser	Pro	Leu	Val
65				70						75				80	
Gln	Ser	Cys	Pro	Glu	Ile	Ala	Gln	Cys	Lys	Glu	Gln	Phe	Ser	Lys	Asp
			85					90						95	
Gln	Lys	Ser	Cys	Leu	Lys	Ile	Ala	Val	Arg	Ser	Gln	Pro	Leu	Gln	Val
		100					105						110		
Tyr	Thr	Ala	Gln	Arg	Glu	Gly	Pro	Pro	Ser	Val	Ala	Val	Thr	Glu	Gly
		115					120					125			
Ser	Gly	Arg	Pro	Val	Val										
															130

<210> 1195

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1195

tctagagcat gatattccgc gggcgcggcc ggggtggactt tggttcgaga gtggaactaa
 60
 gtgagtaatg ggggcggcgc ggccagacgc gtcaccagcc tcctggcgag agtgctgccc
 120
 ggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggcctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gctgaaggc
 300

aagcgttaat cccgtccaac ctgtatcact gcgaagagct cggtcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1196
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1197
 acgcgtgatg atcatgaaaa tggtagacag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgttaacgta caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacggttaa agcgtagacc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg ttttaacccaa atgtagttaa agtcggttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggg
 300
 tttatggaaa aaacagacga tcaagcgta ccagcggatt ttctgcgtt gcgtcatatt
 360
 ggtccgtatg tttaccgcac gacatn
 386

<210> 1198
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1198
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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      1             5             10             15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20             25             30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35             40             45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50             55             60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
      65             70             75             80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85             90             95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100            105            110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115            120            125

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<210> 1199

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1199

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acgcgttcag cgctcatgtac agccccgggc cggccaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatgggtcgg gctggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccaggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcgc ctgccaaagac cttgaccttc tggaatggcc
300
tggtgatecca gttgctcc
318

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<210> 1200

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1200

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Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1             5             10             15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20             25             30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35             40             45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50             55             60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
      65             70             75             80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85             90             95
Val Ile Gln Leu Leu

```

100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
 gtcgacgcac aactccagct ggtcgctccc aacagcccga acatccccct ttatcgcgat
 60
 atgatacctca ccgtgctgcg catggccaag gatgaccgca accgttgga tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttcgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacgggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggg
 300
 ggcgccggca tcatggccgc tgcccacgag ggcgcaagg ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
 60
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttgaggtt
 120

ggtcttctgg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcggt
 240
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgaccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaacctg gatgaatgaa tgaatgactg
 420
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
1				5					10					15	
Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
			20					25				30			
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
		35				40					45				
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
	50				55					60					
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65				70					75					80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
			85					90					95		
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
			100					105					110		
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
		115					120						125		
Ala	Ser	Asn	Asn	Pro	Gly										
			130												

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
 60
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc
 240
 aagatgtgga gggaaatctgt ctgcgcagaa cctggatctc gtggttgtag gacgttgtec
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gagcgagtga caaggatatcc
360
tgggaccatg cgtatgggtt caactgaagc gctggcgaat cgtaaan
407

<210> 1206
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1206
Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
1 5 10 15
Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
20 25 30
Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
35 40 45
Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
50 55 60
Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
65 70 75 80
Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
85 90 95
Glu Ala Leu Ala Asn Arg Lys
100

<210> 1207
<211> 292
<212> DNA
<213> Homo sapiens

<400> 1207
gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag
60
gcttgccctc attcctatgt gctttcccg tcttgcttct ccagccatgt gtgggacaac
120
caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
180
cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
240
agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac
292

<210> 1208
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1208
Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
1 5 10 15
Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
20 25 30
Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

	35					40						45							
Gly	His	Ser	Thr	Cys	Pro	Ser	Lys	Ser	Tyr	Gln	His	Leu	Ser	Trp	Leu				
	50					55					60								
Leu	Asn	Lys	Thr	Gln	Trp	His	Pro	Cys	Gly	Cys	Leu	Pro	Ser	Ser	Phe				
65					70					75					80				
Ile	Ser	Ala	Pro	Gly	Gly	Asp	Ser	Gln	Lys	Val	Ser	Ala	Ala	Pro					
				85					90					95					

<210> 1209

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1209

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ttggttccta taatggcggg agcttacatt tttgctggta tcattatctt gttaatgcat
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gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgccagggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccg
180
ggtgtatctt caaatgaggc aggttttagt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggt gcgatgtag gtactttcct tgatacactt
300
attatctgta caggtttagt gattgttatt tctgggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaactct gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

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<210> 1210

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1210

Leu	Val	Pro	Ile	Met	Ala	Val	Ala	Tyr	Ile	Phe	Ala	Gly	Ile	Ile	Ile				
1				5				10					15						
Leu	Leu	Met	His	Ala	Ser	Glu	Val	Ile	Pro	Ala	Ile	Ser	Thr	Ile	Val				
			20					25				30							
Glu	Tyr	Ala	Phe	Thr	Pro	Ala	Ser	Ala	Gln	Gly	Gly	Phe	Ala	Gly	Ala				
		35					40				45								
Thr	Val	Trp	Met	Ala	Ile	Arg	Phe	Gly	Val	Ala	Arg	Gly	Val	Phe	Ser				
	50				55			60											
Asn	Glu	Ala	Gly	Leu	Gly	Ser	Ala	Pro	Ile	Ala	His	Ala	Ser	Ala	Gln				
65				70				75						80					
Thr	Asn	Glu	Pro	Val	Arg	Gln	Gly	Leu	Val	Ala	Met	Leu	Gly	Thr	Phe				
			85					90					95						
Leu	Asp	Thr	Leu	Ile	Ile	Cys	Thr	Gly	Leu	Val	Ile	Val	Ile	Ser	Gly				
		100					105				110								
Ala	Trp	Thr	Glu	Gly	Leu	Ser	Gly	Ala	Ala	Leu	Thr	Ser	Ala	Ala	Phe				
		115					120				125								
Asn	Leu	Ala	Leu	Pro	Gly	Trp	Gly	Gly	Tyr	Leu	Val	Ala	Ile	Ser					

130 135 140

<210> 1211
 <211> 480
 <212> DNA
 <213> Homo sapiens

<400> 1211
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 60
 agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccctgatc
 120
 tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcatcgctg
 180
 ccacctcctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc
 240
 tttattccct cagagcctcc tgggagcttg ccttgtggct ccttccctgc tccagtctcc
 300
 acccctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca
 360
 gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
 420
 gctcctctgg aaatagttcc ttttgagaag gcatctccag aggctggagt gtgctcgcca
 480

<210> 1212
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 1212
 Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
 1 5 10 15
 Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
 20 25 30
 Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
 35 40 45
 Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
 50 55 60
 Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
 65 70 75 80
 Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
 85 90 95
 Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
 100 105 110
 Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
 115 120 125
 Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
 130 135 140
 Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
 145 150 155 160

<210> 1213
 <211> 1141

<212> DNA

<213> Homo sapiens

<400> 1213

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nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc aggggcgggt taccgggata gaggggcat cagggcggtg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgacgcct atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgagacg tgtacgctg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
gaggagcgtt actcctggga tggacgggggt tggctgtctg acatcaccac cgacgccacg
420
accgtatcga ctacgctcga tgcattgggg cgcgccagtc gtatcaccac taagggccag
480
caggtacgag tggactggga cctcgtgacc ggagccccca cctcgattga tggtcgtcct
540
gtgcttcccc tgcccgagg acgcatcctc ggcgccacac ccacggcgga taccaacctc
600
tgggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt
660
gaggggtgtc cggagacgat caggatggcc gggaacacgc tagtgggtga tggtcaccct
720
tgggtgggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gaccggttaa
780
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840
tcaccctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactcctca
900
cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctctgcgcatc
960
acatcaccga tccgatcagc cactggtggg ccaccacaaa agaccggatc ctctcccggg
1020
acttctgat cgggtgcggc ctctcatcgc gcggtatcgc gtagcggcca cgggcgtagg
1080
aggacccctc ctageccggg ccatttcggg gggactcctc tcaggcgggt tttccgctag
1140
c
1141

```

<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
1           5           10          15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

```


[illegible]

```
<210> 1215
<211> 317
<212> DNA
<213> Homo sapiens
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<400> 1215
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120
ccccggggtc aaccgggcca tcaccgggag aacgcgcgtc ctcgaggagg gtgttctcgc
180
agtcgccggc gtgggtgcgt ggaagaagta ccgcggcacg accttcggcg ggcctgtccc
240
gtcgtgtcc ctcggcctcg tgctcgcgtt catcgtgctg aacaaggctg gctcgcgcga
300
gtacatcgcc tggatcn
317
```

```
<210> 1216
<211> 102
<212> PRT
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<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
          20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
          35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
          50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
          85           90           95
Asp Leu Gln Arg Thr Arg
          100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

naccgctggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acaggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccggtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcggttatt tggactgtaa ccatgcgttt tgtctgttta atgggtttaga gcagagtgat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atgggtcaata ttatcaagat
420
atgggcggtg aggtattagc gcgaggggag atttttcatg aacattgttg gggtagcgcct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```

```

                20                25                30
Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
                35                40                45
Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
                50                55                60
Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
65                70                75                80
Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
                85                90                95
Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
                100                105                110
Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
                115                120                125
Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
130                135                140
Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
145                150                155                160
Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
                165                170                175
Lys Glu Pro Thr Val Asn
                180

```

<210> 1219

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1219

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acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgagggtacc
60
tccagagaaa attaccaaga ccattctgtt agtatatttcc agctccacag gcctttggaa
120
gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccacc
180
aaaggcaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
240
ggcccaaccc tgcagcctct gccatttgg gaaagaccgt gagttggaat tatgggtcgg
300
tggggggc
308

```

<210> 1220

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1220

```

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
1                5                10                15
Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
                20                25                30
Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
                35                40                45
Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

```

50		55		60
Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys				
65	70	75	80	
Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly				
85	90	95		

<210> 1221

<211> 569

<212> DNA

<213> Homo sapiens

<400> 1221

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120
tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctctcc
180
agtgttccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc
240
aggatgcaca cccggtggcc ctgtggtgtg aggccctcagc aaacacggtc agaagatgaa
300
cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcca
360
gaaggggtccc ttgcagtggg gtgggttatgt gcctgcaatc ccagagtgtc ctccaaggac
420
ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt
480
gttttctctet gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
540
ttcacggcac agcctgccga gaaacgcgt
569

<210> 1222

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1222

Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile				
1	5	10	15	
Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val				
20	25	30		
Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser				
35	40	45		
Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser				
50	55	60		
Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys				
65	70	75	80	
Ser His Ser Arg His Ser Leu Pro Arg Asn Ala				
85	90			

<210> 1223

<211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

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60
ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact
120
gtactttcag atgtgttgcc tgggtgttggc caaggccggt gggttctcgg cgaaactgca
180
atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt
240
gaaacaaggc ccgtccccac gatagctcta ccgggacccg gtggagtccc cagacggttg
300
ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag
360
ggcagccaat tcacggacgt aacggtgggc ctgccaccac ccgactcgcc cctcctctct
420
cgtgagttgc tctataccgc catcacgcgt
450

```

<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

```

Lys Leu Ala Gln Ala Ser Ala Asp Ala Ala Leu Lys Leu Val Asp
1          5          10          15
Ala His Arg Leu Leu Cys Ala His Arg Glu Gly Pro Tyr Gly Val Asp
20          25          30
Glu Trp Ser Gln Arg Met Val Thr Val Leu Ser Asp Val Leu Pro Gly
35          40          45
Val Gly Gln Gly Arg Trp Val Leu Gly Glu Thr Ala Ile Val Thr His
50          55          60
Asn Leu Ala Gln Leu Gly Val Asn Asn Gly Asp Cys Gly Val Ile Val
65          70          75          80
Glu Thr Arg Pro Val Pro Thr Ile Ala Leu Pro Gly Pro Gly Gly Val
85          90          95
Pro Arg Arg Leu Pro Cys Ser Leu Ile Pro Ser Leu Gln Pro Leu Gln
100          105          110
Ala Met Thr Ile His Lys Ala Gln Gly Ser Gln Phe Thr Asp Val Thr
115          120          125
Val Val Leu Pro Pro Pro Asp Ser Pro Leu Leu Ser Arg Glu Leu Leu
130          135          140
Tyr Thr Ala Ile Thr Arg
145          150

```

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

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 tcagtgggag gacaagggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc
 120
 caaagcccc cgaaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggacct
 180
 gggaagtgtt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggctttc cacaatgatc ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgaccctgt catcatccca ttctacaaat gaggacactg
 360
 aggcttggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg
 420
 ctggagtgtg ctcatg
 436

<210> 1226
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1226
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 Gly Gly Gln Gly Pro Gln Phe Leu Ala His Trp Pro Arg Glu Val Met
 20 25 30
 Lys Thr Gln Ser Pro Pro Lys Val Arg Ser Arg Lys Lys Pro Asp Pro
 35 40 45
 Asp Gln Met Lys Gly Pro Gly Lys Phe Leu Glu Lys Arg Leu Leu Lys
 50 55 60
 Cys Leu Leu Ala Gly Ile Thr Val Ser Trp Gly Phe Ala His Ser Ile
 65 70 75 80
 Phe Met Ala Phe His Asn Asp Pro Arg Thr Asp Pro Glu Lys Pro Arg
 85 90 95
 Asp Gln Gly Leu Thr Arg Pro Cys His His Pro Ile Leu Gln Met Arg
 100 105 110
 Thr Leu Arg Pro Gly Glu Lys Gly Gly Val Asp Gly Thr Arg Trp Pro
 115 120 125
 Gly Ser Lys Thr Gln Arg Leu Glu Cys Ala His
 130 135

<210> 1227
 <211> 756
 <212> DNA
 <213> Homo sapiens

<400> 1227
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 aatggtattg gaataccgat taacaaggta gataaaatct ttgatagatt ctaccgtgtc
 120
 gacaaagcac gtacacgtaa gatgggcggg acaggactag gtctagctat ttccaaagag
 180

attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct
 240
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga
 300
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat
 360
 ggtatggaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa
 420
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc
 480
 atttcaaatac gttcaatcta atggcgaaaa aacaaaagggt atgccagcaa caggatcatgc
 540
 agtatctcaa attttaagcc cattaaaaga taaaaatggt gattcagtag aacatttaaa
 600
 acgaaatcat aacttaatta ttctgaatt aagtgataac tttatcgttc ttgatttcac
 660
 atatgattta ccgttatcaa ttactttaag ccaagtatta aacatagatg ctaagacacc
 720
 taatcatttt aactttaatc gactactgat tgatca
 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10					15	
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20				25						30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35				40					45				
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
		50				55					60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70					75					80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
			85					90						95	

Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

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 60
 cttgtgcgcc ccatggcaaa ccaggggggtc gaggccactg gagcgatggg aaccgacacc
 120
 ccgtcggcgg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc
 180

gctcaggttaa ccaatccgcc cttggacgct atccgcgagg agcttggtcac ctccctgacg
 240
 ggcaccateg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tgggcaagtg
 300
 gtcgtcaact acccgatcat cgattccgac cagcttgcca agatcattca catcgacgct
 360
 gacggggagc atccgga
 377

<210> 1230
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1230
 Thr Arg Arg Gln Gln Leu Phe Gly Tyr Thr Ser Glu Glu Pro Lys Met
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 Leu Val Ala Pro Met Ala Asn Gln Gly Val Glu Ala Thr Gly Ala Met
 20 25 30
 Gly Thr Asp Thr Pro Leu Ala Val Leu Ser Asn Cys Pro Arg Met Leu
 35 40 45
 Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu
 50 55 60
 Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly
 65 70 75 80
 Pro Glu Ala Asn Leu Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val
 85 90 95
 Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile
 100 105 110
 His Ile Asp Ala Asp Gly Glu His Pro
 115 120

<210> 1231
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1231
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 120
 cacactgttc tggctttggt agaacatggc gaagatgttg tagtggttaga taatttatca
 180
 aactcttccg atgagtctct gcgtcgcgtt gagaaactcg cgggtagaag tgctcagttc
 240
 taccaaggcg atatcttgga tgctgagtgt ctgcatcgca tcttcgaggc tcacgacatc
 300
 tcggctgtga tccattttgc tgggctaaag ggtgtcggag agtcgacgcg t
 351

<210> 1232
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 1232

```

Met Ala Val Leu Ile Thr Gly Asp Ala Gly Tyr Ile Gly Ser His Thr
 1           5           10          15
Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
          20          25          30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
          35          40          45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
          50          55          60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
65          70          75          80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
          85          90

```

<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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120
cctgcctatc tcttttgcac tccaaagtcc agttttatta aatcccaggg tctaagattt
180
tttctttgag aatttatctc cagtgtttct atggaaatta aaaaagaaaa ttaggataat
240
tcaatgtoga aatgttgcat gcaccttttg agaaatttat atttttagg ttgaaggact
300
tgcttttttg gcagcgtatt tttggagggtg gaatgtagtt attttaataa ccatgtccta
360
attatttata gcttcctgcc tgacacagct cacttcaaga agtgcacaat gtcagaacgt
420
ggaattaagt gggcttgtga atattgtacg tatgaaaact ggccatctgc aatcaagtgt
480
accatgtgtc gtgccccaaag acctagtggg acaattatta cagaagatcc atttaaaagt
540
ggttcaagtg atgttggtag agattgggat ccttcagca ccgaaggagg aagtagtcct
600
ttgatatgtc cagactctag tgcaagacca agggtgaaat cttcgtatag catggaaaat
660
gcaaataagt ggtcatgcca catgtgtaca tatttgaact ggccaagagc aatcagatgt
720
accagtgtc tatcccaacg taggaccagg agtcctacag aatctcctca gtcctcagga
780
tctggctcaa gaccagtgtc tttttctgtt gatccttgtg aggaatacaa tgatagaaat
840
aaactgaaca ctaggacaca gcaactggact tgctctgttt gcacatatga aaactgggcc
900
aaggctaaaa gatgtgttgt ttgtgatcat ccagaccta ataacattga agcaatagaa
960

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ttggcagaga ctgaagaggc ttcttcaata ataaatgagc aagacagagc tcgatggagg
 1020
 ggaagttagc gtagtggttaa tagccaaagg agatcacctc ctgctacgaa gcgggactct
 1080
 gaagtgaaaa tggattttca gaggattgaa ttggctggtg ctgtgggaag caaggaggaa
 1140
 cttgaagtag actttaaaaa actaaagcaa attaaaaaca ggatgaaaaa gactgattgg
 1200
 ctcttcctca atgcttgtgt gggggttgta gaagggtgatt tagctgccat agaagcatac
 1260
 aagtcatcag gaggagacat tgcacgtcag ctcaccgcag atgaagtacg cttgctgaat
 1320
 cgtccttctg cctttgatgt tggctatact cttgtacact tggctatacg ttttcagagg
 1380
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 1440
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 1500
 cagagaaagg gggattttgc ttgctatttt ctgactgacc ttgtaacatt tacattgcc
 1560
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 1620
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 1680
 gctacacgtt tggacagtcg actgtatgca ctttggaaac ggactgcagg agactgccta
 1740
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 gccctgcatg acagcctgca tgactgttca cattgggttt acacacgctg gaaagattgg
 1860
 gaatcatggt attctcagag ctttggttta catttttctt tgagagaaga acagtggcaa
 1920
 gaagactggg catttatact ctctcttgct agtcagcctg gagcaagctt ggagcagacg
 1980
 cacatTTTTg tactggcaca tattcttaga cgaccaatta tagtttatgg agtaaaatat
 2040
 tacaagagtt tccggggaga aacttttaga tatactcggg ttcaagggtg ttatctgcct
 2100
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 2160
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 2220
 aatctcaata ccgatgatga tgtcaccatc acatttttgc ctctgggtga cagtgaagg
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 gaccgtacc gacagatccg gccgtgtaca tccctgtctg atggagagga agatgaggat
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gaccctaaag ttagtgtggt gctccaagca gagtcgacat catggaatga accaaatctg
2640
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2760
tattaagaca gaactttttt tccttcctaaa ttgtaaatct gtctataaat gtaacgcatg
2820
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2880
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3060
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<210> 1234

<211> 708

<212> PRT

<213> Homo sapiens

<400> 1234

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			20					25					30		
Ser	Gly	Thr	Ile	Ile	Thr	Glu	Asp	Pro	Phe	Lys	Ser	Gly	Ser	Ser	Asp
		35					40					45			
Val	Gly	Arg	Asp	Trp	Asp	Pro	Ser	Ser	Thr	Glu	Gly	Gly	Ser	Ser	Pro
	50					55					60				
Leu	Ile	Cys	Pro	Asp	Ser	Ser	Ala	Arg	Pro	Arg	Val	Lys	Ser	Ser	Tyr
65					70					75					80
Ser	Met	Glu	Asn	Ala	Asn	Lys	Trp	Ser	Cys	His	Met	Cys	Thr	Tyr	Leu
			85						90					95	
Asn	Trp	Pro	Arg	Ala	Ile	Arg	Cys	Thr	Gln	Cys	Leu	Ser	Gln	Arg	Arg
			100					105					110		
Thr	Arg	Ser	Pro	Thr	Glu	Ser	Pro	Gln	Ser	Ser	Gly	Ser	Gly	Ser	Arg
		115					120					125			
Pro	Val	Ala	Phe	Ser	Val	Asp	Pro	Cys	Glu	Glu	Tyr	Asn	Asp	Arg	Asn
	130					135					140				
Lys	Leu	Asn	Thr	Arg	Thr	Gln	His	Trp	Thr	Cys	Ser	Val	Cys	Thr	Tyr

145				150				155				160			
Glu	Asn	Trp	Ala	Lys	Ala	Lys	Arg	Cys	Val	Val	Cys	Asp	His	Pro	Arg
				165				170						175	
Pro	Asn	Asn	Ile	Glu	Ala	Ile	Glu	Leu	Ala	Glu	Thr	Glu	Glu	Ala	Ser
				180				185						190	
Ser	Ile	Ile	Asn	Glu	Gln	Asp	Arg	Ala	Arg	Trp	Arg	Gly	Ser	Cys	Ser
			195				200					205			
Ser	Gly	Asn	Ser	Gln	Arg	Arg	Ser	Pro	Pro	Ala	Thr	Lys	Arg	Asp	Ser
	210					215					220				
Glu	Val	Lys	Met	Asp	Phe	Gln	Arg	Ile	Glu	Leu	Ala	Gly	Ala	Val	Gly
225					230					235					240
Ser	Lys	Glu	Glu	Leu	Glu	Val	Asp	Phe	Lys	Lys	Leu	Lys	Gln	Ile	Lys
				245					250					255	
Asn	Arg	Met	Lys	Lys	Thr	Asp	Trp	Leu	Phe	Leu	Asn	Ala	Cys	Val	Gly
			260					265						270	
Val	Val	Glu	Gly	Asp	Leu	Ala	Ala	Ile	Glu	Ala	Tyr	Lys	Ser	Ser	Gly
			275				280						285		
Gly	Asp	Ile	Ala	Arg	Gln	Leu	Thr	Ala	Asp	Glu	Val	Arg	Leu	Leu	Asn
	290					295					300				
Arg	Pro	Ser	Ala	Phe	Asp	Val	Gly	Tyr	Thr	Leu	Val	His	Leu	Ala	Ile
305					310					315					320
Arg	Phe	Gln	Arg	Gln	Asp	Met	Leu	Ala	Ile	Leu	Leu	Thr	Glu	Val	Ser
				325					330					335	
Gln	Gln	Ala	Ala	Lys	Cys	Ile	Pro	Ala	Met	Val	Cys	Pro	Glu	Leu	Thr
			340					345					350		
Glu	Gln	Ile	Arg	Arg	Glu	Ile	Ala	Ala	Ser	Leu	His	Gln	Arg	Lys	Gly
		355					360					365			
Asp	Phe	Ala	Cys	Tyr	Phe	Leu	Thr	Asp	Leu	Val	Thr	Phe	Thr	Leu	Pro
	370					375					380				
Ala	Asp	Ile	Glu	Asp	Leu	Pro	Pro	Thr	Val	Gln	Glu	Lys	Leu	Phe	Asp
385					390					395					400
Glu	Val	Leu	Asp	Arg	Asp	Val	Gln	Lys	Glu	Leu	Glu	Glu	Glu	Ser	Pro
			405					410						415	
Ile	Ile	Asn	Trp	Ser	Leu	Glu	Leu	Ala	Thr	Arg	Leu	Asp	Ser	Arg	Leu
			420					425						430	
Tyr	Ala	Leu	Trp	Asn	Arg	Thr	Ala	Gly	Asp	Cys	Leu	Leu	Asp	Ser	Val
		435					440					445			
Leu	Gln	Ala	Thr	Trp	Gly	Ile	Tyr	Asp	Lys	Asp	Ser	Val	Leu	Arg	Lys
	450					455					460				
Ala	Leu	His	Asp	Ser	Leu	His	Asp	Cys	Ser	His	Trp	Phe	Tyr	Thr	Arg
465					470					475					480
Trp	Lys	Asp	Trp	Glu	Ser	Trp	Tyr	Ser	Gln	Ser	Phe	Gly	Leu	His	Phe
				485					490					495	
Ser	Leu	Arg	Glu	Gln	Trp	Gln	Glu	Asp	Trp	Ala	Phe	Ile	Leu	Ser	
			500					505				510			
Leu	Ala	Ser	Gln	Pro	Gly	Ala	Ser	Leu	Glu	Gln	Thr	His	Ile	Phe	Val
		515					520					525			
Leu	Ala	His	Ile	Leu	Arg	Arg	Pro	Ile	Ile	Val	Tyr	Gly	Val	Lys	Tyr
	530					535					540				
Tyr	Lys	Ser	Phe	Arg	Gly	Glu	Thr	Leu	Gly	Tyr	Thr	Arg	Phe	Gln	Gly
545					550					555					560
Val	Tyr	Leu	Pro	Leu	Leu	Trp	Glu	Gln	Ser	Phe	Cys	Trp	Lys	Ser	Pro
				565				570					575		
Ile	Ala	Leu	Gly	Tyr	Thr	Arg	Gly	His	Phe	Ser	Ala	Leu	Val	Ala	Met

	580		585		590
Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr					
595		600		605	
Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg					
610		615		620	
Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu					
625		630		635	640
Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr					
	645		650		655
Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn					
	660		665		670
His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg					
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Gln Ile Arg Pro Cys Thr Ser Leu Ser Asp Gly Glu Glu Asp Glu Asp					
	690		695		700
Asp Glu Asp Glu					
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<210> 1235

<211> 383

<212> DNA

<213> Homo sapiens

<400> 1235

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240
gcacagctgg ctgccctcgg ggtggccgcc gactacctag atggcatcgg gatgcaggcc
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<210> 1236

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1236

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Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly					
	20		25		30
Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro					
	35		40		45
Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser					
	50		55		60
Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile					

65	70								75				80			
Ala	Gln	Leu	Ala	Ala	Leu	Gly	Val	Ala	Ala	Asp	Tyr	Leu	Asp	Gly	Ile	
			85						90					95		
Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met	
			100					105					110			
Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly		
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360																
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420																
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660																
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1200																

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 1380
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 1440
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<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

Met	Cys	Gln	Leu	Gly	Leu	His	Gln	Lys	Ala	Asn	Arg	Leu	Pro	Glu	Ile
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Gln	Gln	Pro	Leu	Cys	Arg	Lys	Glu	Gly	Leu	Cys	Gln	Ile	Val	Arg	Arg
			20					25					30		
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln
			35				40					45			
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val
	50				55					60					
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn
65					70				75					80	
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp
			85					90					95		
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro
		100					105					110			
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys
	115						120				125				
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu
	130					135				140					
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile
145					150				155					160	
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu
			165					170					175		
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr
	180						185					190			
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val
	195					200					205				
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp
	210				215					220					
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe
225				230					235					240	
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu
			245					250					255		
Tyr	Arg	Ser	Asp	Val	Phe	Lys	Gly	Glu	Asn	Tyr	Gln	Lys	Glu	Leu	Asn


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<210> 1239
<211> 447
<212> DNA
<213> Homo sapiens
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<210> 1240
<211> 149
<212> PRT
<213> Homo sapiens
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<400> 1240

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Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
      20           25           30
Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
      35           40           45
Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
      50           55           60
Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
      65           70           75           80
Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
      85           90           95
Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
      100          105          110
His Asn Ile Arg Val Tyr Asp Glu Ala Thr Asp Leu Leu Ala Tyr
      115          120          125
Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
      130          135          140
Lys Cys Leu Val His
145

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<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

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acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
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120
taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
180
gagagaaaaga aagaagaaag gtccccgattg caacgtgtca gatcttgcaa ccttcccccc
240
acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
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480
attcatgct
489

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<210> 1242

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1242

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Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

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      1           5           10           15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20           25           30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35           40           45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50           55           60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
65           70           75           80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85           90           95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100          105          110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115          120          125

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<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

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120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtgggtt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgctgctgt ccctaccacc cgcagtcctc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

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<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

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Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
1           5           10           15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20           25           30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35           40           45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50           55           60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
65           70           75           80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

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<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

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<400> 1245
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ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcagggcct
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

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<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

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<400> 1246
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1      5      10      15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20      25      30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35      40      45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50      55      60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65      70      75      80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85      90      95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100      105      110
Ser

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<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac gcgcattcctg cccagatcc cgatggatgg gcatgacctc
 60
 aaccgggtgt ggcgggacgt cggcctgac gtgcacccgc cgatgctcta catgggctac
 120
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgct tgcctggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcgtt cctcggtatc
 240
 ggtatcacc cgggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc
 300
 tgggaccccg gggaaaacc cttcttcattg cctggctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu Thr Ser Asn Pro Gly Thr Arg Ile Leu Pro Gln Ile Pro Met Asp
 1 5 10 15
 Gly His Asp Leu Asn Pro Val Trp Arg Asp Val Gly Leu Ile Val His
 20 25 30
 Pro Pro Met Leu Tyr Met Gly Tyr Val Gly Phe Ser Val Ala Phe Ala
 35 40 45
 Phe Ala Ile Ala Ala Leu Leu Gly Gly Arg Leu Asp Ala Ala Trp Ala
 50 55 60
 Arg Trp Ser Arg Pro Trp Thr Ile Val Ala Trp Ala Phe Leu Gly Ile
 65 70 75 80
 Gly Ile Thr Leu Gly Ser Trp Trp Ala Tyr Tyr Glu Leu Gly Trp Xaa
 85 90 95
 Gly Trp Trp Phe Trp Asp Pro Gly Glu Asn Pro Phe Phe Met Pro Trp
 100 105 110
 Leu Gly Gly Thr Pro Leu Ile His Ser Leu
 115 120

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgccacg ctgattgccg tggaaccggt gccggcaatg
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 ggcgcgcagt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
 120
 attccactgg aaagcgccgt ggcggatgcg gtggtgtgcg cacaagcctt ccattggttt
 180
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctgggtgtgga atgtgcgcga cgagtcgggtg gattgggtcg ccgccattac tcaaattcatc
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcgga agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1250
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro
 1 5 10 15
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His
 20 25 30
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala
 35 40 45
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala
 50 55 60
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly
 65 70 75 80
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile
 85 90 95
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr
 100 105 110
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe
 115 120

<210> 1251
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 1251
 accggtctct tcttcggaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagtgg gcgcctcctt
 120
 cctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgtccca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggcctacaac gtcacacgc cctttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtggg gactctgtca accaccgect gctcttcagt ggctaccage
 480
 accacctgtc tgccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc
 600
 ccttcttcct catcctcttc atgtacttca gcggtgctn ttactgcctc taaagctgag
 660
 agcttgattc cagggcctgc cctgctcctg gtggcaccga gtggcctgta ctactggtag
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5					10				15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20					25				30			
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
		35				40						45			
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser
	50					55					60				
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65					70					75					80

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
 60
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa
 240
 acagtctgtg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa
 480
 cccccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccctt tttccagag gcagccggac tctgctgagc
 600
 cttcctgtgg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttggggc taacgctata ctgtctgctg
60
ttcggctcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag taccctgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg ccgcgcacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgcccgc tgcctggcga ggcgcacgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcattgt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcgggtac aaggcccgcg g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His


```

      35              40              45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
  50              55              60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65              70              75              80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85              90              95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
      100              105              110
Trp

```

<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

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cgcgtacagc tgattgaagg tgatgtcgcc aacgccgacc tggtaggcgca agccgccatc
60
ggcgccacgg cggtagtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccggtg tgaagcgtgt ggtatttgc tccagcgttg cggtagtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
294

```

<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

```

Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
  1              5              10              15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
      20              25              30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
      35              40              45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
      50              55              60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65              70              75              80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85              90              95
Tyr Ala

```

<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259

nnacactcta gcctctgact caaggaagct gccaggggtc ttgcccttcg gtttgggggg
 60
 atcccgcttc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcggtggc
 120
 ctacacgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
 180
 agcgtggtgg acgtggctaa gggagtgggtc cagggaggcc tggacaccac tcggtctgca
 240
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1260

Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1261

ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
 60
 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
 120tgaccctggc ggtcggtgg tggatcgaca acaaggtcag cgcccgctg 180
 ggcaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
 300
 accacctcgt tcgtcgcgga catcggtgct
 330

<210> 1262
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1262
 Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala
 1 5 10 15
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile
 20 25 30
 Met Glu Tyr Gly Ser Arg Leu Leu Ala Leu Leu Thr Leu Ala Val
 35 40 45
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val
 50 55 60
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu
 65 70 75 80
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met
 85 90 95
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala
 100 105 110

<210> 1263
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1263
 acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
 60
 gcatcgatga tgagttttgct cgccctgggca acacctagca gcaatggcat cgatagtccc
 120
 tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
 180
 gtcaacagac cgtcaccgtg gttgacgata tcgccggtgg aggcgtcctt gacgacgac
 240
 tggccacgcg ccaggggaata catctcccca tccacccaaa agaacgcccc caagctgggc
 300
 atcttggcca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c
 351

<210> 1264
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1264
 Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser
 1 5 10 15
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

```

      20      25      30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
      35      40      45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
      50      55      60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
      65      70      75      80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
      85      90      95
His Arg Pro Arg
      100

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<210> 1265
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataaac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

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<210> 1266
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1      5      10      15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
      20      25      30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
      35      40      45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
      50      55      60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
      65      70      75      80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
      85      90      95
Ser Arg Arg

```

<210> 1267
 <211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
 60
 ggaactgtcc cacggcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
 120
 aacctgtggt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
 240
 gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttgggtgcag
 300
 catggtagga agagcaccaa gtcttgact ctgttgattt ata
 343

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5					10					15	
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
			20					25					30		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		35					40					45			
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		50				55					60				
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65					70				75					80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
				85					90					95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
 60
 ggacgccgac ctggagccgg ccgcctaga cgggctgac gtccaggtgg ggtccccccg
 120
 cggcgcggac tacgacaccg tgtccgaaac ctttggtctt tcgccacaat tctgcagcca
 180
 gacctggggc gcacggccgg ttcaccgcaa cgggtgacct ggcagcggcc atggcgggtg
 240
 ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttgggtga ggcggacaat ccctttcatc atgagcaatt ccggggagaat ggcgggcccgc
 360
 acggggaaga gggttggatc ggcattggcct c
 391

<210> 1270
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1270
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile
 1 5 10 15
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His
 20 25 30
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg
 35 40 45
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr
 50 55 60
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Pro Gly Arg Ser Ala
 65 70 75 80
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala
 85 90 95
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg
 100 105 110

<210> 1271
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 1271
 acgcgtcgtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga
 60
 accagaaagc gtcattcggg tggatgaacga gaacgggcca tggatgtggtg ggacggataa
 120
 cccccggttg cgtcaccata tggccacta aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tcctaccacc gccagaagcg ggcattcaat agtctctaag cgcggcaaaa
 240
 tatagtcgtt aagctgggta gcatgcgctc gtgccagccc ggctgagta atagcctcgg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttggtgccg cagatcggtc aacgacagca
 360
 gtatctgctc agtggtcatg gtgaccttc ctggtcactc gtcaggcctg tggcggcgcc
 420
 cactgcaact cgttggtgac cggctgggtg cgacgtcgct tgaggaatgc gggcagtctc
 480
 ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
 540
 cggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
 660

t

661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

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Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
 1           5           10           15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
      20           25           30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
      35           40           45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
      50           55           60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
      65           70           75           80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
      85           90           95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
      100          105          110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
      115          120          125

```

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

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gccggcgaga ccggtgccgg aaagaccatg gtgggtcaccg gtattgggtt gctgctcggc
60
gacaaggctg acaactggatt ggtccggcat ggctgcgacg gtgccgtcgt cgaagccgtt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtgag
180
gttatctgcg ctcgacacat cagagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgagg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgccct caacgaggat cgcgctgggg ccgagatgga acgaggggtg
480
cttacgcgt
489

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<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
          20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
          35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
          50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
          85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
          100          105          110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
          115          120          125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
          130          135          140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
145          150          155          160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

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nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggagggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgagggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaagggtcg atctaattgga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccgggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

```

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```


1	5	10	15
Ala Glu Leu Leu Val	Ala Arg Leu Glu Gly Glu Met His	Ala His Ser	
20	25	30	
Asp Pro Thr Pro Ser	Pro Gln Pro Pro Glu Asp Ala Gly	Leu Ile Asp	
35	40	45	
Val Ala Leu Lys Glu	Ala Lys Lys Ala Phe Asp Glu Gly	Lys Val Asp	
50	55	60	
Leu Met Asp Lys Leu	Asn Gln Glu Ile Leu Arg Leu Ala	Asn Glu Phe	
65	70	75	80
Gly Ala Leu Gly Leu	Glu Ser Ile Glu Leu Gly Ser Asp	Ala Lys Met	
85	90	95	
Ala Val Arg Lys Gly	Asn Gln Lys Ser Ala Phe Ser Arg	Leu Thr Pro	
100	105	110	
Gly Glu Arg Leu Arg	Leu Arg Ile Ala Thr Ala Ile	Ala Leu Leu Arg	
115	120	125	

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
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 120
 atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaatata
 180
 aagtctctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
 240
 gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
 300
 tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaacg tactctgtt
 360
 gatgaatcac atgatgaaat tcaacatgat gg
 392

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser	
1	15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu	
20	30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro	
35	45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln	
50	60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg	
65	80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln	

				85						90					95				
Glu	Tyr	Lys	Ile	Ser	Ser	Phe	Glu	Gln	Arg	Leu	Met	Asn	Glu	Ile	Glu				
				100					105					110					
Phe	Arg	Leu	Glu	Arg	Thr	Pro	Val	Asp	Glu	Ser	His	Asp	Glu	Ile	Gln				
		115					120					125							
His	Asp																		
	130																		

<210> 1279

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1279

atggagtcgc agactctccg ccacatgacg gaggacgact gcgccgacaa cggcatccca
60
ctccccaaacg tcaactccag gatcctctct aagggtcatcg agtactgcaa cagtcacgtc
120
cacgcgcgcg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
180
tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
240
aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
297

<210> 1280

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1280

Met	Glu	Ser	Gln	Thr	Leu	Arg	His	Met	Ile	Glu	Asp	Asp	Cys	Ala	Asp				
1				5				10					15						
Asn	Gly	Ile	Pro	Leu	Pro	Asn	Val	Asn	Ser	Arg	Ile	Leu	Ser	Lys	Val				
			20				25					30							
Ile	Glu	Tyr	Cys	Asn	Ser	His	Val	His	Ala	Ala	Ala	Lys	Pro	Ala	Asp				
		35				40					45								
Ser	Ala	Ala	Ser	Glu	Gly	Gly	Glu	Asp	Leu	Lys	Ser	Trp	Asp	Ala	Lys				
		50			55				60										
Phe	Val	Lys	Val	Asp	Gln	Ala	Thr	Leu	Phe	Asp	Leu	Ile	Leu	Ala	Ala				
65					70				75					80					
Asn	Tyr	Leu	Asn	Ile	Lys	Gly	Leu	Leu	Asp	Leu	Thr	Cys	Gln	Thr	Gly				
			85					90					95						

Ala Asp Met

<210> 1281

<211> 515

<212> DNA

<213> Homo sapiens

<400> 1281

acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
 120
 tggcgtgcc a ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcacac
 420
 gtgggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1282

Met	Gly	Glu	His	Ser	Phe	Leu	Asn	Ser	Phe	Pro	His	Leu	Tyr	Arg	Phe
1				5					10					15	
Glu	Asn	Tyr	Gln	Gln	Leu	Met	Gly	Arg	Val	Ala	Cys	Gln	Val	Met	Ala
			20					25					30		
Ala	Trp	Ser	Pro	Ser	Glu	Glu	Gly	Arg	Leu	Asn	Arg	Gly	Arg	Pro	Pro
		35					40					45			
His	Tyr	Gln	Val	Gly	Thr	Ala	Gly	Arg	Ser	Arg	His	Pro	His	Pro	Lys
	50					55					60				
Glu	Val	Gln	Asn	Arg	Gln	Gln	Glu	Glu	Pro	Asp	Ser	Asn	Arg	Val	Gly
65					70					75				80	
Val	Ile	Arg	Arg	Ile	Ala	Lys	Asp	Val	Thr	Thr	His	Gln	Leu	Trp	Glu
				85					90					95	
Pro	Lys	Gly	Val	Cys	Gly	Pro	Leu	Lys	Gly	Lys	Met	Ile	Gln	Lys	Leu
			100					105					110		
Cys	Ser	Leu	Pro	Leu	Leu	Leu	Lys	Asn	Thr	Gly	Val	Thr	Arg	Gly	Glu
		115						120					125		
Ser	Thr	Gly	Leu	Ile	Ser	Ser									
		130				135									

<210> 1283

<211> 296

<212> DNA

<213> Homo sapiens

<400> 1283

gaattctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc
 60
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actgggttaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn
 296

<210> 1284
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1284
 Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val
 1 5 10 15
 Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn
 20 25 30
 Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val
 35 40 45
 Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg
 50 55 60
 Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn
 65 70 75 80
 Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala
 85 90

<210> 1285
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1285
 gggcccttc ttacctgcc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaaggtc catctagagg aggtaaaaga cagggctgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca
 180
 agaagcaaca aaagggatc tacacctcag accagggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
 300
 aaacccacac ttcagaggca ggcttttaaaa cgctgactt ctgtcagggc cacaggctgg
 360
 gctgccc aaa gctcctacgg ggctggggga tccgagagag gacttccac tagtccaaga
 420
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggccctt
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
           20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
           35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
           50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
           85           90           95
Ser Pro Arg Cys Gly Asp
           100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttccag tttgattgca gccagagggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtt ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
           20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
           35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
           50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
           85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 1289
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 60
 cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
 120
 cctgcacggg ggaggaggca aggtggcccc tgccgtgtggg cacagagccc accttcgggt
 180
 ccagcccagag gcccctttcc cagagcccc tccaaggagg ccataccacc tgcattccca
 240
 agatggcgtg gggcgctcct ggtgcaggag caggggacag tcagggaggc gtgtggcgga
 300
 cagtagcagc ccccagccc cctcccccc accggt
 336

<210> 1290
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1290
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala
 1 5 10 15
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr
 20 25 30
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu
 35 40 45
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro
 50 55 60
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala
 65 70 75 80
 Ala Pro Gln Pro Pro Ser Pro His Arg
 85

<210> 1291
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1291
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 60
 atcttttgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattctca
 120
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
 180
 gtaaaccggg tttccccaa cggataccca tcaactgcat gctcggtttt ttctatccga
 240

cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1292
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr
 1 5 10 15
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val
 20 25 30
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu
 35 40 45
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp
 50 55 60
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr
 65 70 75 80
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala
 85 90 95
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu
 100 105 110
 Pro Glu Gln Leu Thr Glu Val Asp Gly
 115 120

<210> 1293
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 1293
 nngccggccg cccgagagct gtctgaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
 120
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt
 180
 gcaaagtgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgcga
 340

<210> 1294
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1294

```

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1           5           10           15
Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
          20           25           30
Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
          35           40           45
Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
          50           55           60
Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
65           70           75           80
Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
          85           90           95
Asn Ala

```

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

```

ggatcccgga gacctcgctc gcgaaacgtca cctcgtccag ggccgaggcg cggaacaccg
60
acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg
120
cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgcca
180
cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgtcgc
240
cgagctcttc cttcgcccgg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc
300
ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
351

```

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

```

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1           5           10           15
Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
          20           25           30
Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
          35           40           45
Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
          50           55           60
Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
65           70           75

```

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

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gtgcaccccg attccattg ccaccgactt cgagtaaact ccagtccga ggacacgaga
60
gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
120
gatacactct acaaattctg gggccacca caccaagaag acacggagga gccaacaaaa
180
gaaggaccat acgaaatgca ccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
240
agggttctgt gggccctctt gcatgggctg cctgccccct ctgttctggc ctggctcaag
300
caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
356
```

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

```
Met Gly Thr Leu His Ala Thr Ala Pro Thr Arg Gly Thr Asp Thr Leu
1          5          10          15
Tyr Lys Ser Arg Gly Pro Pro His Gln Glu Asp Thr Glu Glu Pro Thr
20          25          30
Lys Glu Gly Pro Tyr Glu Met His Pro Gln Ser Asn Gln Pro Ile Gln
35          40          45
Glu Lys Ile Arg Leu Arg Val Leu Trp Ala Leu Leu His Gly Leu Pro
50          55          60
Cys Pro Pro Val Leu Ala Trp Leu Lys His Leu Thr Pro Ala Cys Ser
65          70          75          80
Lys Glu Pro Trp Leu Pro Glu Gln Ser Thr Gly
85          90
```

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

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ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctggtg
60
gttggttgga ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttctctg
120
tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
180
gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggcctgtgc
240
cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct
300
tccttag
307
```

<210> 1300

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1300

```

Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1           5           10          15
Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
          20          25          30
Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
          35          40          45
Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
          50          55          60
Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
65          70          75          80
Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
          85          90

```

<210> 1301

<211> 408

<212> DNA

<213> Homo sapiens

<400> 1301

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ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
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gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
120
cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
180
atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat
240
gtgacttcat ctaatacgac tgcggggcga gcgccagcgg gaacagggtt tggtcctttg
300
tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg ttctggacct
360
ttccctactg agttgtttga cgaagatggt gacggtcttg gtacgcgt
408

```

<210> 1302

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1302

```

Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1           5           10          15
Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
          20          25          30
Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
          35          40          45
Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

```

50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr	
65				70					75				80		
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
			85						90				95		
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
		100						105				110			
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120				125				
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130						135									

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgcc
60
gtttgccctg gggccctctc atcccacatc attttttcaa cccttcccca ncctttcnga
120
aatagggcca accccttaaa aancaaatnt tcanataaac ccttttcctt ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgccta gcccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattht gcctgggcgt cctgtacttt tottaactaa atttgggtgc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agcccttcc caggctgggt
600
ccctgccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttctc tttcttgtct
720
gggggctcaa gaatccagac gccacctcc ccgagcgagc accaagacag gaagccaacc
780
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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
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 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
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 180
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 240
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 420
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 480
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 540
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 caggaatgct tgcggctgct ggagttatgg atctccacg gcgtgacgat ttccgcgctc
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt
 720
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 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
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 20 25 30
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val
 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
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 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

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 120
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 480
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<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

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His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35				40					45				
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50					55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65				70				75					80		
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
			85				90						95		
Ser	Pro	Pro	Ala												
			100												

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

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 120
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 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
 ggtacacgca acttcggtga aaccttgctg ccgttcaaga aagggtgcgtt ccagatggcg
 300
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 360
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 420
 ggactgacgt tggatgacat gccacggttg atggagacct gccgtcaaca aatgcgcgag
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 563

<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

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Thr	Gly	Val	Pro	Tyr	Arg	Thr	Val	Cys	Ile	Gly	Lys	Lys	Ser	Leu	Lys	20	25	30	
Trp	Val	Pro	Leu	Phe	Gly	Gln	Leu	Phe	Trp	Leu	Ala	Gly	Asn	Val	Leu	35	40	45	
Ile	Asp	Arg	Gly	Asn	Ala	His	Lys	Ala	Arg	Arg	Ser	Met	Leu	Thr	Thr	50	55	60	
Thr	His	Thr	Leu	Gln	His	Lys	Asp	Thr	Ser	Ile	Trp	Val	Phe	Ala	Glu	65	70	75	80
Gly	Thr	Arg	Asn	Phe	Gly	Glu	Thr	Leu	Leu	Pro	Phe	Lys	Lys	Gly	Ala	85	90	95	
Phe	Gln	Met	Ala	Ile	Ala	Ala	Gly	Val	Pro	Ile	Val	Gln	Val	Cys	Val	100	105	110	
Ser	Thr	Tyr	Val	Lys	His	Met	Lys	Leu	Asn	Arg	Trp	Asp	Ser	Gly	Asp	115	120	125	
Ile	Leu	Ile	Arg	Ser	Leu	Pro	Pro	Ile	Pro	Thr	Thr	Gly	Leu	Thr	Leu	130	135	140	
Asp	Asp	Met	Pro	Arg	Leu	Met	Glu	Thr	Cys	Arg	Gln	Gln	Met	Arg	Glu	145	150	155	160
Cys	Ile	Glu	Ala	Met	Asp	Arg	Glu	Leu	Glu	Ile	Val	Pro	Cys	Arg	Asn	165	170	175	
Glu	Leu	Ala	Arg	Glu	Gly	Arg										180			

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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 180
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 420
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 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg
			20					25					30		
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
			35				40					45			
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
			50			55					60				
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
65					70				75					80	
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90						95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
			100					105					110		
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
			115				120					125			
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
			130			135					140				
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
145					150					155				160	
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165					170						175	
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
			180					185					190		
Gln	Val	Pro	Ala												

195

<210> 1313

<211> 367

<212> DNA

<213> Homo sapiens

<400> 1313

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 120
 aaggaaggga gaggacagag cctggtgtga ctctggggtt tctggtgtgt atagctggtg
 180
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 240
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 300
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 gtcatga
 367

<210> 1314

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1314

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Pro	Leu	Pro	Arg	Pro	His	Leu	Leu	Gly	Leu	Ile	Ser	Asp	Arg	Tyr	Leu
			20					25					30		
Lys	Phe	Ser	Val	Ser	Lys	Thr	Gly	Leu	Ser	Thr	Cys	Pro	Ala	Asn	Leu
			35				40						45		
Ser	Ser	Ser	Arg	Ala	Pro	Leu	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Thr	Ser
			50				55					60			
Tyr	Thr	His	Gln	Lys	Pro	Arg	Ser	His	Thr	Arg	Leu	Cys	Pro	Leu	Pro
65					70					75				80	
Ser	Leu	Pro	Pro	Pro	Ser	Ile	Leu	Ser	Pro	Lys	Ser	Arg	Asp	Cys	Pro
				85						90				95	
Thr	Leu	Ala	Ala	Thr	Thr	Ala	Ala	Ala	Pro	Ala	Ala	Pro	Pro	Ala	Pro
			100					105						110	
Ala	Thr	Trp	Arg	Gly	Cys	Met	Asp	Ile							
			115				120								

<210> 1315

<211> 5245

<212> DNA

<213> Homo sapiens

<400> 1315

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120
gaagctttga gtccttgccc aagtactgta agtaccaagt ctccagccagg cagcagtgtc
180
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1680

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 5040
 ttaattatgg tttcatggac actgttgagc aatgtacagt gtatgggtgtg cttacctgtc
 5100
 cactctagag cattgcttac aggttttttg ttttttaaga tgctgtgctg taaaatactg
 5160
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 5245

<210> 1316

<211> 856

<212> PRT

<213> Homo sapiens

<400> 1316

Met	Asp	Glu	Asp	Ser	Ser	Leu	Arg	Asp	Tyr	Thr	Val	Ser	Leu	Asp	Ser
1				5					10					15	
Asp	Met	Asp	Asp	Ala	Ser	Lys	Leu	Leu	Gln	Asp	Tyr	Asp	Ile	Arg	Thr
			20					25					30		
Gly	Asn	Thr	Arg	Glu	Ala	Leu	Ser	Pro	Cys	Pro	Ser	Thr	Val	Ser	Thr
		35					40					45			
Lys	Ser	Gln	Pro	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Gly	Val	Lys	Met
	50					55					60				
Thr	Ser	Phe	Ala	Glu	Gln	Lys	Phe	Arg	Lys	Leu	Asn	His	Thr	Asp	Gly
65					70					75				80	
Lys	Ser	Ser	Gly	Ser	Ser	Ser	Gln	Lys	Thr	Thr	Pro	Glu	Gly	Ser	Glu
			85						90					95	
Leu	Asn	Ile	Pro	His	Val	Val	Ala	Trp	Ala	Gln	Ile	Pro	Glu	Glu	Thr
			100					105					110		
Gly	Leu	Pro	Gln	Gly	Arg	Asp	Thr	Thr	Gln	Leu	Leu	Ala	Ser	Glu	Met
		115					120					125			
Val	His	Leu	Arg	Met	Lys	Leu	Glu	Glu	Lys	Arg	Arg	Ala	Ile	Glu	Ala
	130					135					140				
Gln	Lys	Lys	Lys	Met	Glu	Ala	Ala	Phe	Thr	Lys	Gln	Arg	Gln	Lys	Met
145				150						155				160	
Gly	Arg	Thr	Ala	Phe	Leu	Thr	Val	Val	Lys	Lys	Lys	Gly	Asp	Gly	Ile
			165						170					175	
Ser	Pro	Leu	Arg	Glu	Glu	Ala	Ala	Gly	Ala	Glu	Asp	Glu	Lys	Val	Tyr
			180					185					190		
Thr	Asp	Arg	Ala	Lys	Glu	Lys	Glu	Ser	Gln	Lys	Thr	Asp	Gly	Gln	Arg
	195						200					205			
Ser	Lys	Ser	Leu	Ala	Asp	Ile	Lys	Glu	Ser	Met	Glu	Asn	Pro	Gln	Ala
	210					215						220			
Lys	Trp	Leu	Lys	Ser	Pro	Thr	Thr	Pro	Ile	Asp	Pro	Glu	Lys	Gln	Trp
225					230					235				240	
Asn	Leu	Ala	Ser	Pro	Ser	Glu	Glu	Thr	Leu	Asn	Glu	Gly	Glu	Ile	Leu
			245						250					255	
Glu	Tyr	Thr	Lys	Ser	Ile	Glu	Lys	Leu	Asn	Ser	Ser	Leu	His	Phe	Leu
		260					265						270		
Gln	Gln	Glu	Met	Gln	Arg	Leu	Ser	Leu	Gln	Gln	Glu	Met	Leu	Met	Gln

275	280	285
Met Arg Glu Gln Gln Ser Trp Val Ile Ser Pro Pro Gln Pro Ser Pro		
290	295	300
Gln Lys Gln Ile Arg Asp Phe Lys Pro Ser Lys Gln Ala Gly Leu Ser		
305	310	315
Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro		
325	330	335
Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser		
340	345	350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg		
355	360	365
Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg		
370	375	380
Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe		
385	390	395
Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu		
405	410	415
Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly		
420	425	430
His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser		
435	440	445
Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn		
450	455	460
Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe		
465	470	475
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser		
485	490	495
Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp		
500	505	510
Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys		
515	520	525
Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met		
530	535	540
Lys Arg Ala Ala Leu Leu Glu Lys Arg Leu Arg Arg Glu Lys Glu Thr		
545	550	555
Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu		
565	570	575
Glu Thr Arg Arg Lys Thr Glu Glu Glu Arg Gln Lys Lys Glu Asp Glu		
580	585	590
Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln		
595	600	605
Leu Lys Leu Met Glu Asp Met Asp Thr Val Ile Lys Pro Arg Pro Gln		
610	615	620
Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His		
625	630	635
Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu		
645	650	655
Ser Leu Ala Ser Leu Asn Thr Gly Asp Asn Glu Ser Val His Ser Gly		
660	665	670
Lys Arg Thr Pro Arg Ser Glu Ser Val Glu Gly Phe Leu Ser Pro Ser		
675	680	685
Arg Cys Gly Ser Arg Asn Gly Glu Lys Asp Trp Glu Asn Ala Ser Thr		
690	695	700
Thr Ser Ser Val Ala Ser Gly Thr Glu Tyr Thr Gly Pro Lys Leu Tyr		

705		710		715		720									
Lys	Glu	Pro	Ser	Ala	Lys	Ser	Asn	Lys	His	Ile	Ile	Gln	Asn	Ala	Leu
				725					730					735	
Ala	His	Cys	Cys	Leu	Ala	Gly	Lys	Val	Asn	Glu	Gly	Gln	Lys	Lys	Lys
			740					745					750		
Ile	Leu	Glu	Glu	Met	Glu	Lys	Ser	Asp	Ala	Asn	Asn	Phe	Leu	Ile	Leu
		755					760					765			
Phe	Arg	Asp	Ser	Gly	Cys	Gln	Phe	Arg	Ser	Leu	Tyr	Thr	Tyr	Cys	Pro
	770					775					780				
Glu	Thr	Glu	Glu	Ile	Asn	Lys	Leu	Thr	Gly	Ile	Gly	Pro	Lys	Ser	Ile
785					790					795					800
Thr	Lys	Lys	Met	Ile	Glu	Gly	Leu	Tyr	Lys	Tyr	Asn	Ser	Asp	Arg	Lys
			805						810					815	
Gln	Phe	Ser	His	Ile	Pro	Ala	Lys	Thr	Leu	Ser	Ala	Ser	Val	Asp	Ala
			820					825					830		
Ile	Thr	Ile	His	Ser	His	Leu	Trp	Gln	Thr	Lys	Arg	Pro	Val	Thr	Pro
		835					840					845			
Lys	Lys	Leu	Leu	Pro	Thr	Lys	Ala								
	850					855									

<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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120
gagggtagcc agcctagcac catggacgcc accgcagtag caggcatcga gaccaagaaa
180
gagaaggagg acctgtgctt gctaaagaag gaggagaagg aggagccagt agccccggag
240
ctggcaacaa cggcgcctga gacgcagag cctgaggcag aggcggacgg ggaggagctg
300
gacggcagcg acatgtcagc catcatctat gaaatcccca aggagcctga gaagaggcgg
360
cggagcaagc ggtcgcgggt gatggatgct gacggcctgc tcgagatggt cactgcccc
420
tacgagggct gcagccaagt ctacgtggcc ctcagcagct tccagaacca cgtcaatctt
480
gtgcatcgga aaggaaagac caaagtgtgc cctcatcctg gctgtggcaa gaagttctat
540
ttatccaacc acctgcggcg gcacatgatc atccattcag gtgtccgtga attcacctgc
600
gagacctgcg gcaagtccct caagaggaag aaccacctgg aggtacatcg gcgcaccac
660
accggcgaga cccccctgca gtgcgtgatc tgtggctacc agtgccggca gcgcgcgtcg
720
ctcaactggc acatgaagaa gcacactgcg gaggtgcagt acaacttcac gtgcgatgcc
780
tgcggaagc gcttcgagaa gctggacagc gtcaagttcc acacgctcaa aagccaccgc
840

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gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctattttattc gtccgctcgg
900
acaccacagc ccgggcttgc cggggcctgg acagctgcga gggccggccg gaccgcgggc
960
cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcaggtt cccaccccc
1020
ccccaccgca tccttctcgg agctgggtgcc tggggctgca ttgctggaac tgtgtcaaga
1080
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1123

<210> 1318

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

Xaa	Ala	Glu	Gly	Ile	His	Leu	Asn	Met	Ala	Ala	Gly	Ser	Gly	Val	Pro
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Gly	Ser	Gly	Leu	Gly	Glu	Glu	Val	Pro	Cys	Ala	Met	Met	Glu	Gly	Val
			20					25					30		
Ala	Ala	Tyr	Thr	Gln	Thr	Glu	Pro	Glu	Gly	Ser	Gln	Pro	Ser	Thr	Met
		35				40					45				
Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
	50					55					60				
Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
65				70						75				80	
Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
			85						90					95	
Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
			100					105					110		
Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met
			115				120					125			
Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
			130				135				140				
Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
145					150					155				160	
Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
			165						170					175	
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
			180					185					190		
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
		195					200					205			
Arg	Lys	Asn	His	Leu	Glu	Val	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Thr
		210				215						220			
Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
225				230						235				240	
Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
			245						250					255	
Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
			260					265					270		
Phe	His	Thr	Leu	Lys	Ser	His	Pro	Asp	His	Lys	Pro	Thr			
		275					280					285			

<210> 1319
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 1319
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 120
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttcctct gggagctccg tgggagagtg
 180
 gagtcatgac caagtcagag agcagttggg gaggaaccca gaagccctgg gatggtgtct
 240
 gcatgggaat gtgtaggag gacagccaca tgggcctggg ccttcctttc tctccttct
 300
 gtccccctcc cccatcccc tctctctccc cttccttctg gaaaccagc actgggggaa
 360
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag
 420
 tttgctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcata
 480
 gtatggttgt gtgtgcatgg ggggtgggga ttctgacctg gggtcactcc caaagctt
 538

<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1320
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp
 1 5 10 15
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu
 20 25 30
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp
 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
 130 135 140
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly
 145 150 155 160
 Ile Leu Thr Trp Gly His Ser Gln Ser
 165

<210> 1321
 <211> 1292
 <212> DNA
 <213> Homo sapiens

<400> 1321
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 cggaacgcag caatgatccg gcgtcagtcg tctcagtcac cgcaggatga cccgggtgcaa
 120
 cgccccgata gctcacggta cgcaacgacg aagcagggat cgctcagacc cgggcacgtc
 180
 atcgtcaaga agatttacaa caacaatgtc cttctcggcg tcaacggttc ggggaccgaa
 240
 atgggtcgtca atgctcgcgg tatcgccctac ggacgacacc gcggggagat cgtcgtatgcc
 300
 tcgtcggccc agcgatatgt cgcagagggg gcctatcgca cgaccgccat cgcatactgc
 360
 ctaacgaacg ccactcacac cgaggtgcga gtggcacagg caatcgtcga attggcgcgc
 420
 gaagagctgg gcactcccca tgcccagcgg atgatgctgc ccatacctcga tcacctcgtc
 480
 gcagctgtgc accgagctaa gcagggggcc gtcatacgatt ttcccttga atgggaagtc
 540
 cgtcagctct atcccgatga ggcgggaactg ggccgacgcg ctgtcgaaat cgtcgacggg
 600
 gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
 660
 cagcgggtggg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
 720
 gttttcaacc agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
 780
 tcccgcttcg taccacacct tcgctatctg ttcgctcggg cctcggacaa caagcagctc
 840
 tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg
 900
 gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgacct gacggaagcc
 960
 gaaatcaact acatcgctt acacaccacc cggctctaca acgaggtgat ggggatggat
 1020
 gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat
 1080
 gaccttctcg ccgaaaagcc agcaccaaag tccccagat caaaattcag atgcgtgcct
 1140
 aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtggg ggggtggggg
 1200
 ggggggggtt gcattgctcag ggggtgggggc tttgttgaag ccatacatgaa gttgcaaacc
 1260
 caggactgtt ccactagtaa agccccctgc tt
 1292

<210> 1322
 <211> 317
 <212> PRT

<213> Homo sapiens

<400> 1322

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Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
      65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
      145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
      305          310          315

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<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

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ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

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tacctcaatg cattgagtgg tcaggggtgtg catgtcatca ccgtcaatga ctatcttgca
 180
 caacgtgatg ctgaactcaa ccgcccatta tttgagtttt tgggtttaag catcgggtgtg
 240
 atttattcga tgcaaagccc tgctgagaaa gcacaagctt atttagcaga cattacttac
 300
 ggtacc
 306

<210> 1324
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1324
 Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile
 1 5 10 15
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys
 20 25 30
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln
 35 40 45
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
 50 55 60
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
 65 70 75 80
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
 85 90 95
 Asp Ile Thr Tyr Gly Thr
 100

<210> 1325
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1325
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 60
 attgtcgcgc catgttccgt ctccgctcat gccggaagct ggccagagaa accgatcacg
 120
 atggtcgtgc cgtttcccg cggaggcggc accgatctcg tggcgcgctc gatccagccg
 180
 cttttgcagc gcgaactcgg acaaccgggtg gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgctcggct ccagcttcgt ggcgcggggc gttgccgacg gctacacggc tggcgtggtc
 300
 accacgagca ccacgcgggt aagcgtcgcg ctctatcccc ggctggccta caaccgcaga
 360
 gcggactttg catacgccgg cttcatcggc n
 391

<210> 1326
 <211> 130
 <212> PRT

<213> Homo sapiens

<400> 1326

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Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1              5              10              15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20              25              30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35              40              45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50              55              60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65              70              75              80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85              90              95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100             105             110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115             120             125
Ile Gly
      130

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<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga ttccggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
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tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcacgcaccg gcgagccgct cgtcgatgcc
240
gcatgagcgc agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

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<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

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Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1              5              10              15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20              25              30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35              40              45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

```

      50              55              60
Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala
65              70              75              80
Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg
      85              90              95
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly
      100              105

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<210> 1329
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<400> 1329
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ggcgatatcg gcatttacgc gatggcgacc ctggtggttg aactgctgga tagacaactc
120
cagggccttg aagaccatcc tgaatggtta gatgttgaaa tcgatgtggt acctggcatc
180
tctgcaatgc aagctggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
240
gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgc
300
ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
360
cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
420
ggtcgtcagt tgacgcgt
438

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<210> 1330
 <211> 146
 <212> PRT
 <213> Homo sapiens

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<400> 1330
Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
1      5      10      15
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
      20      25      30
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
      35      40      45
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
      50      55      60
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
65      70      75      80
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
      85      90      95
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
      100      105      110
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
      115      120      125
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

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130
 Thr Arg
 145

135
 140

<210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 1331
 gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatcccctgg
 60
 catcttcttg ccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggg
 180
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gaccactca cgaccgcggc
 240
 gtcgggccga tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaacgtg atc
 453

<210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
 acgcgtcgcc cacactgttg ccgccgaggc ggctcgagcc ggggtgtgagg aaggatccgc
 60
 ggcacagctc gtcggtcaag atgggtctag tgctgctcgt atggcggcgg aggcattccgc
 120
 gcgaagggct aaagcggatg gactaagcca gcttgctatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggg cgggcgagcg aaatgtgtat ttgctgggt cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccggg agaaccgcga gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcacat ggccggtctta tcgctaccc gacagacacg
 420
 ggttatgcct tcgggtgccc gntagggaaat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
 nctctcatac tttttttccc ttttctatc cccctctct cgcaccgggt gaagcgttct
 60
 gtgaatgccg agaagaagcg tcgtgaggtc ctgatcagg cctccgggta ccgtggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcgccac ttattcggtc
 180

cgtgaccgtc gtgctaagaa gggtagcttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gtcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg
 480
 ttcggcccggt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggaac
 600
 ctccgacca gctcgcgatg ctgagcatgt cgagggtggt acatgtcgtg gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 cttcgcggta tgtcggcagg ttacgcgt
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1			5					10						15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25					30		
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
			35				40					45			
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
			50			55					60				
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65				70						75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
				85					90					95	
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
			100					105					110		
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
			115				120						125		
Ser	Gln	Pro	Gln	Asn	Ala	Ala	Ala								
			130			135									

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gttagccagg gcagcctcct tcagtgggtca
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatgggtcag tgtgggtcag tgctttcgct gtatgagact acagggtttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcacc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gcc
 364

<210> 1338

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1338

Met	Gly	Glu	His	Val	Ser	Glu	Gly	His	Ser	Lys	Ala	His	Glu	Trp	Ala
1				5					10					15	
Ser	Cys	Leu	Met	Val	Ser	Val	Gly	Gln	Cys	Phe	Arg	Cys	Met	Arg	Leu
			20					25					30		
Gln	Gly	Phe	Ser	Ala	Ser	Pro	Trp	Gly	Thr	Ile	Gly	Ser	Gly	Ser	Leu
		35					40					45			
Pro	Ala	Val	Gly	Pro	Val	Leu	Gly	Thr	Ala	Gly	Cys	Gly	Ala	Gly	Leu
	50				55						60				
Leu	Arg	Ala	Ser	Tyr	Gln	Met	Pro	Ala	Ala	Pro	Pro	Glu	Val	Thr	Thr
65					70					75				80	
Thr	Thr	Ile	Ser	Arg	Cys	Cys	Gln	Cys	Pro	Leu	Gly	Val	Arg	Val	Ala
			85						90					95	

<210> 1339

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1339

cgcgttgtct tcaacatcga cgaaaagcag tgcattgacc tggcgccaccg tgggtactgag
 60
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggccgtgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc tttgaccccg cacaatgatc gtggcacggc gatcgcgggc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgccccg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggagtt
 480

gacgccggta tcgactttctc cgacatgccc aagatccgcc gcaccgtoga gtactgcacc
 540
 tgtctgccag taccggccccg ccagccctac tccggcgatc tgggtcttcac cgccttctcc
 600
 gggtcccacc aggacgccat caagaagggt ctggaagacc tggccccggc cgc
 653

<210> 1340
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 1340
 Arg Val Val Phe Asn Ile Asp Glu Lys Gln Cys Ile Asp Leu Ala His
 1 5 10 15
 Arg Gly Thr Glu Trp Val Val Arg Tyr Ala Asp Lys Tyr Leu Gly Asp
 20 25 30
 Val Glu Phe Gly Tyr Glu Tyr Ser Pro Glu Met Phe Ser Gln Thr Arg
 35 40 45
 Thr Asp Phe Ala Ile Asp Val Cys His Ser Val Met Asp Val Trp Gln
 50 55 60
 Pro Gly Pro Gly Arg Glu Ile Ile Leu Asn Leu Pro Ala Thr Val Glu
 65 70 75 80
 Met Ser Thr Pro Asn Thr Tyr Ala Asp Gln Ile Glu Tyr Phe Cys Arg
 85 90 95
 Asn Ile Arg Asp Arg Glu His Val Cys Val Ser Leu His Pro His Asn
 100 105 110
 Asp Arg Gly Thr Ala Ile Ala Ala Glu Phe Ala Gln Met Ala Gly
 115 120 125
 Ala Asp Arg Val Glu Gly Cys Phe Phe Gly Pro Gly Glu Arg Pro Gly
 130 135 140
 Thr Val Asp Leu Val Thr Leu Gly Met Asn Leu Val Ser Gln Gly Val
 145 150 155 160
 Asp Ala Gly Ile Asp Phe Ser Asp Met Pro Lys Ile Arg Arg Thr Val
 165 170 175
 Glu Tyr Cys Thr Cys Leu Pro Val Pro Ala Arg Gln Pro Tyr Ser Gly
 180 185 190
 Asp Leu Val Phe Thr Ala Phe Ser Gly Ser His Gln Asp Ala Ile Lys
 195 200 205
 Lys Gly Leu Glu Asp Leu Ala Arg Arg
 210 215

<210> 1341
 <211> 666
 <212> DNA
 <213> Homo sapiens

<400> 1341
 accggttgct gatttccttg ttggagtctt caccactatg agcagtgact ccattgtttt
 60
 gcaaagtttc ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccgggtgg taatggatca
 420
 caagcccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgtc gccactccc caggatacct cgttaagcga caaacagagg atgtgcagat
 540
 gtcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggc ctgttggtga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1			5					10					15		
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25				30			
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35				40						45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50				55						60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65				70					75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
			85					90					95		
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
	115					120						125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130				135						140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145				150					155					160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
			165					170					175		
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180				185					190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
	195					200						205			
Leu															

<210> 1343

<211> 270

<212> DNA

<213> Homo sapiens

<400> 1343

ccggaaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
 60
 aaaagctgtg gaaaccgaaa tgagactcca tcggaccag tcataattga cagattcttt
 120
 ttaaaatttt tctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
 180
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1344

Pro	Glu	Met	Cys	Arg	Val	Leu	Leu	Thr	His	Glu	Val	Met	Cys	Ser	Arg
1				5					10					15	
Cys	Cys	Glu	Lys	Lys	Ser	Cys	Gly	Asn	Arg	Asn	Glu	Thr	Pro	Ser	Asp
			20					25					30		
Pro	Val	Ile	Asp	Arg	Phe	Phe	Leu	Lys	Phe	Phe	Leu	Lys	Cys	Asn	
		35				40					45				
Gln	Asn	Cys	Leu	Lys	Thr	Ala	Gly	Asn	Pro	Arg	Asp	Met	Arg	Arg	Phe
	50					55					60				
Gln	Val	Val	Leu	Ser	Thr	Thr	Val	Asn	Val	Asp	Gly	His	Val	Leu	Ala
65					70					75					80
Val	Ser	Asp	Asn	Met	Phe	Val	His	Asn	Asn						
			85						90						

<210> 1345

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1345

acgcgtttga aaccaccga tgacttgctg gtgatcctgg gtaccgcgt cagcaacttc
 60
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
 120
 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgcccatt gc
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

Thr	Arg	Leu	Lys	Pro	Thr	Asp	Asp	Leu	Ser	Val	Ile	Leu	Gly	Thr	Arg
1				5				10					15		
Val	Ser	Asn	Phe	Ser	Gly	Thr	Asp	Asn	Thr	Asp	Phe	Tyr	Asp	Pro	Thr
		20					25					30			
Lys	Ala	Asp	Asn	Arg	Leu	Thr	Tyr	Arg	Gln	Thr	Gly	Val	Val	Thr	Pro
		35				40					45				
Tyr	Ala	Gly	Ile	Val	Tyr	Asp	Leu	Asn	Asp	Ile	Trp	Ser	Val	Tyr	Thr
	50				55					60					
Ser	Tyr	Thr	Lys	Ile	Tyr	Lys	Pro	Gln	Asn	Ser	Lys	Asp	Ala	Asp	Arg
65				70				75						80	
Lys	Leu	Leu	Asp	Pro	Ile	Glu	Gly	Asp	Thr	Tyr	Glu	Ala	Gly	Leu	Lys
			85					90					95		
Ala	Ala	Phe	Phe	Asp	Gly	Arg	Leu	Asn	Ala	Ser	Phe	Ala	Ala	Phe	Arg
			100				105						110		
Ile	Glu	Gln	Asp	Asn	Val	Ala	Gln	Tyr	Val	Ser	Gly	Phe	Glu	Thr	Asp
		115					120					125			
Ser	Cys	Ile	Ala	His	Cys										
		130													

<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

naccaccttc tgggcaggct ctcattcttt cattccaaga agcatttatt aaagactggc
60
tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct
120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgcctg aggcagggga aggggcacgc tttctgaaaa
240
acccccccaa accgattcca ggaagcccaa agggcgggccc ctctgcccgc agcactgcct
300
tcacgtttac ttccatcccc gcctctctct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc acccttttatt taagactcct attatctgca cacaatggaa gtttag
415

<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100           105

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<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gccgggatcg tcacaccaca gcaggtcgcg ttaccccatg acgtcttccg tgagcttggc
60
gctcagacgg tcatgcgttc gatcgccgaa aagcttgaggc ttccgggtcat cgtaagccg
120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttcctcag
180
gccgtcgga acgcctatgc ctatgacgac atggtttag tagaggaatt cattgtgggc
240
aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagccgtc
300
gagattcgcc ctgtcgggtg tgtttatgat tattcagcga tgtacaccgg tggtagagaca
360
cgactaacag ctctgcaga cattagcgat acggcgggcc aaaccgacgac ggcatggcc
420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
480
gagtcgggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
540
ctcgtacccg tggctatgaa agctgccggt ctagaccttg gcgaggtgtg ctctcgacta
600
gtcgatgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
660
cgtgcgcgtc aagcaggcat ctgtcgtctt gctcggcgtc gtccttgcca gtgtgatggt
720
cttcctcgga ctgtggcaga tgaacgtttt tgagtcccaa cgtgacgact cgacgcaggc
780
gcgtatcaac gagccagtga tcacctggaa tgaggcgctt aagaaggcca gtgtcatggc
840
tcagtacgga cgccgggtga cggtgacggg cacgttccaa ccgtcgacca caaccttgat
900
aggcacatcg tggccagtac gcgt
924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe
 1 5 10 15
 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
 nngtgcacgg agggcggtgct ggtctacgcc ctgtatctgc tgtctcgatg cacgatgggc
 60
 gacgagacgc aaaacgcatt gcttctcagt attctgctgc acccgggtct gctcatcgtc
 120
 gaccacattc acttcagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg
 180
 gcccgacgg acgcacggc cctctttctc tgaaccgcc tgtttgcctc gctgctccag
 240
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 65 70 75 80
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Gly Val Cys Ile Asp Cys
 85 90 95
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe
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 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr
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 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val
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 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys
 195 200 205
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<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

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Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala	Trp
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Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val	Phe
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Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg	Phe
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 35 40 45
 Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile
 50 55 60
 Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser
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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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			20					25					30		
Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
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Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
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Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
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Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
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Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
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Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
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Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
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Leu	Gln	Glu	Trp	Val	Thr	Ser	Thr	Glu	Leu	Leu	Ile	Ser	Leu	Asp	Arg
225				230					235					240	
Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
			245				250						255		
Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

				260									270			
Cys	Asn	Gly	His	Ala	Ser	Glu	Cys	Gly	Pro	Asp	Val	Ala	Gly	Gln	Leu	
		275					280					285				
Ala	Cys	Arg	Cys	Gln	His	Asn	Thr	Thr	Gly	Thr	Asp	Cys	Glu	Arg	Cys	
		290				295					300					
Leu	Pro	Phe	Phe	Gln	Asp	Arg	Pro	Trp	Ala	Arg	Gly	Thr	Ala	Glu	Ala	
305					310					315					320	
Ala	His	Glu	Cys	Leu	Pro	Cys	Asn	Cys	Ser	Gly	Arg	Ser	Glu	Glu	Cys	
			325					330						335		
Thr	Phe	Asp	Arg	Glu	Leu	Phe	Arg	Ser	Thr	Gly	His	Gly	Gly	Arg	Cys	
			340					345					350			
His	His	Cys	Arg	Asp	His	Thr	Ala	Gly	Pro	His	Cys	Glu	Arg	Cys	Gln	
		355					360					365				
Glu	Asn	Phe	Tyr	His	Trp	Asp	Pro	Arg	Met	Pro	Cys	Gln	Pro	Cys	Asp	
		370				375					380					
Cys	Gln	Ser	Ala	Gly	Ser	Leu	His	Leu	Gln	Cys	Asp	Asp	Thr	Gly	Thr	
385					390					395					400	
Cys	Ala	Cys	Lys	Pro	Thr	Val	Thr	Gly	Trp	Lys	Cys	Asp	Arg	Cys	Leu	
			405					410						415		
Pro	Gly	Phe	His	Ser	Leu	Ser	Glu	Gly	Gly	Cys	Arg	Pro	Cys	Thr	Cys	
			420					425					430			
Asn	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Cys	Asp	Pro	Arg	Ser	Gly	Arg	Cys	
		435					440					445				
Pro	Cys	Lys	Glu	Asn	Val	Glu	Gly	Asn	Leu	Cys	Asp	Arg	Cys	Arg	Pro	
		450				455				460						
Gly	Thr	Phe	Asn	Leu	Gln	Pro	His	Asn	Pro	Ala	Gly	Cys	Ser	Ser	Cys	
465					470					475					480	
Phe	Cys	Tyr	Gly	His	Ser	Lys	Val	Cys	Ala	Ser	Thr	Ala	Gln	Phe	Gln	
			485					490						495		
Val	His	His	Ile	Leu	Ser	Asp	Phe	His	Gln	Gly	Ala	Glu	Gly	Trp	Trp	
			500					505					510			
Ala	Arg	Ser	Val	Gly	Gly	Ser	Glu	His	Ser	Pro	Gln	Trp	Ser	Pro	Asn	
		515					520					525				
Gly	Val	Leu	Leu	Ser	Pro	Glu	Asp	Glu	Glu	Glu	Leu	Thr	Ala	Pro	Gly	
		530				535					540					
Lys	Phe	Leu	Gly	Asp	Gln	Arg	Phe	Ser	Tyr	Gly	Gln	Pro	Leu	Ile	Leu	
545					550					555					560	
Thr	Phe	Arg	Val	Pro	Pro	Gly	Asp	Ser	Pro	Leu	Pro	Val	Gln	Leu	Arg	
			565						570					575		
Leu	Glu	Gly	Thr	Gly	Leu	Ala	Leu	Ser	Leu	Arg	His	Ser	Ser	Leu	Ser	
			580				585						590			
Gly	Pro	Gln	Asp	Ala	Arg	Ala	Ser	Gln	Gly	Gly	Arg	Ala	Gln	Val	Pro	
		595					600					605				
Leu	Gln	Glu	Thr	Ser	Glu	Asp	Val	Ala	Pro	Pro	Leu	Pro	Pro	Phe	His	
		610				615				</						

690	695	700
Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
705	710	715
Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		
	725	730
Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		
	740	745
Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		
	755	760
Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		
785	790	795
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		
	805	810
Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		
	820	825
Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		
	835	840
Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		
	850	855
Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		
865	870	875
Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		
	885	890
Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg		
	900	905
Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln		
	915	920
Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		
	930	935
Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys		
945	950	955
Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		
	965	970
Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		
	980	985
Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		
	995	1000
His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		
	1010	1015
Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly		
1025	1030	1035
Ser Asp Cys Gly Ser Pro Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu		
	1045	1050
Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala		
	1060	1065
Arg Glu Ala Phe Leu Glu Gln Met Met Gly Leu Glu Gly Ala Val Lys		
	1075	1080
Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala		
	1090	1095
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		
1105	1110	1115
Val Leu Glu Ser Ser Glu Glu Glu Ile Leu His Ala Ala Ala Ile Leu		

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1125      1130      1135
Ala Ser Leu Glu Ile Pro Gln Glu Gly Pro Ser Gln Pro Thr Lys Trp
1140      1145      1150
Ser His Leu Ala Ile Glu Ala Arg Ala Leu Ala Arg Ser His Arg Asp
1155      1160      1165
Thr Ala Thr Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser
1170      1175      1180
Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala
1185      1190      1195      1200
Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala
1205      1210      1215
Ala Gln Lys Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala
1220      1225      1230
Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro
1235      1240      1245
Tyr Leu Ala Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg
1250      1255      1260
Ala Glu Asp Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala
1265      1270      1275      1280
Ser Trp Gln His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala
1285      1290      1295
Ala Gln Ala Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser
1300      1305      1310
Arg Leu Thr Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala
1315      1320      1325
Ala Leu Thr Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val
1330      1335      1340
Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln
1345      1350      1355      1360
Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser
1365      1370      1375
Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala
1380      1385      1390
Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys
1395      1400      1405
Lys Gly Arg Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala
1410      1415      1420
Lys Ala Leu Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg
1425      1430      1435      1440
Leu Thr Ser Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val
1445      1450      1455
Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val
1460      1465      1470
Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile
1475      1480      1485
Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu
1490      1495      1500
Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr
1505      1510      1515      1520
Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser
1525      1530      1535
Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Gln Glu
1540      1545      1550
Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp

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 1570 1575 1580
 Ser Trp Gln
 1585

<210> 1363
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1363
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 gaaggcgcca ccgaagacaa ggacgtagag gaaagccgcg ctgtgctcga aggcgcagca
 120
 ggaatctgcg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt
 180
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca
 240
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga
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 cccatgcact tgcgtgcctg gaggcattggc taccaggcaa tcccctcatt tccagaatga
 360
 gcctgttttt gaaagcgact aggggaagtgc ag
 392

<210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1364
 Met Arg Gly Leu Pro Gly Ser His Ala Ser Arg His Ala Ser Ala Trp
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 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu
 20 25 30
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu
 35 40 45
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
 65 70 75 80
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu
 85 90 95
 Arg Leu Gln Trp Arg Leu Tyr Pro
 100

<210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 1365

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 ctacagcggg ccctgggttca ggatcgccaa gaggcgcctt ggaatgaggt ggatgaggtc
 120
 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg
 180
 ctgggaatca cccacattct gaatgctgcg catggcaccg gcgtttacac tggccccgaa
 240
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tcctgaggtg
 300
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgaggcgct gctgacttac
 360
 agagggaaag tcctggtcag cagcgaaatg ggcacagcc ggtcagcagt gctggtggtc
 420
 gcctacctga tgatcttcca caacatggcc a
 451

<210> 1366
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1366
 Xaa Arg Val Arg Glu Lys Met Asp Asp Thr Ser Leu Tyr Asn Thr Pro
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 Cys Val Leu Asp Leu Gln Arg Ala Leu Val Gln Asp Arg Gln Glu Ala
 20 25 30
 Pro Trp Asn Glu Val Asp Glu Val Trp Pro Asn Val Phe Ile Ala Glu
 35 40 45
 Lys Ser Val Ala Val Asn Lys Gly Arg Leu Lys Arg Leu Gly Ile Thr
 50 55 60
 His Ile Leu Asn Ala Ala His Gly Thr Gly Val Tyr Thr Gly Pro Glu
 65 70 75 80
 Phe Tyr Thr Gly Leu Glu Ile Gln Tyr Leu Gly Val Glu Val Asp Asp
 85 90 95
 Phe Pro Glu Val Asp Ile Ser Gln His Phe Arg Lys Ala Ser Glu Phe
 100 105 110
 Leu Asp Glu Ala Leu Leu Thr Tyr Arg Gly Lys Val Leu Val Ser Ser
 115 120 125
 Glu Met Gly Ile Ser Arg Ser Ala Val Leu Val Val Ala Tyr Leu Met
 130 135 140
 Ile Phe His Asn Met Ala
 145 150

<210> 1367
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1367
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 cgccgatacg cgccaacgcc gtagaccgcg aacgctggct caccggcgcc gctgtactgc
 120

tcgtcgtcgc attgctgctg gtcacgctcg cactgcccgct cagcgcactc gtcggccaga
 180
 gcttcttcga ccgcgaaggc gccttcgctg gcctcgccaa cttcgtcgc tacctcgaca
 240
 accccgcctt ggtccagtcg gccttcaaca gcctctggct ggccgcgac agcgccgtca
 300
 tctgcaccgc catcgccctac gtctacgcgt
 330

<210> 1368
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 1368
 Thr Ala Asn Ala Gly Ser Pro Ala Pro Leu Tyr Cys Ser Ser Ser His
 1 5 10 15
 Cys Cys Trp Ser Ser Ser His Cys Pro Ser Ala His Ser Ser Ala Arg
 20 25 30
 Ala Ser Ser Thr Ala Lys Ala Pro Ser Ser Ala Ser Pro Thr Ser Leu
 35 40 45
 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Pro Ser Thr Ala Ser
 50 55 60
 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser
 65 70 75 80
 Thr Arg

<210> 1369
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1369
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 catcacctgt acgtactgca ggctctcatg ctggggctgc tggagccgcg catgcggacg
 120
 cccctggacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc
 180
 ttcgaggtgg agggggagtc ctcggttgcc gggctaagtg ctgaccgtcg ccgttccctc
 240
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag
 300
 cgcgtgcccc ccggtctgct ggccctggac aacatgttgt acttctccag aaacgc
 356

<210> 1370
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1370
 Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

```

      1             5             10             15
Leu Gly Leu Leu Glu Pro Arg Met Arg Thr Pro Leu Asp Pro Tyr Ser
      20             25             30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
      35             40             45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
      50             55             60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
      65             70             75             80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
      85             90             95
Asn Met Leu Tyr Phe Ser Arg Asn
      100

```

<210> 1371

<211> 648

<212> DNA

<213> Homo sapiens

<400> 1371

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tcgcgagcac actccagcct ctgggctgcc tttttcaggt ttgcaaact ggctatgaat
60
tggtcagcgg ttggattagc cagttctgca gactggctca caccagacc atctggaccg
120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
tttgccctct aagaagccta ctttcctctt ttctctctct cctctcccta tttctctttg
240
ttgagagagc agtcagatta acccaacaac tcttgagagt ccttggtcac ctgagagcat
300
ggaaagtcca tgccctcacc agagtaatga ctaccatttc tccaaaactc tcctcatgcc
360
atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc
420
ttaagttata cctacaataa aagaccagc cttagcccat ggctgaatgt tgaatactgt
480
tgcattgaaa tttgggattt ctagttagag gctttataaa ggtagaatca tgcagacaca
540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
600
ttctagaaga atgtgtcatt gtcagtaatt ggaattactg acagatct
648

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<210> 1372

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1372

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Met Phe Gln Val Pro Ser Phe Leu Cys Leu Leu Phe Ser Trp Val Leu
      1             5             10             15
Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
      20             25             30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```



```

          35          40          45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
   50          55          60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
65          70          75          80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
          85          90          95
Lys Leu Tyr Leu Gln
          100

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<210> 1373
 <211> 369
 <212> DNA
 <213> Homo sapiens

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<400> 1373
caattggttt tccccaaactt tctacttgca aagcaacttc ttagacctgg ggtcctctct
60
tgcagggcgcc ctgcatggca gagaactttt tccaccacaa ccttcgtgta acaggcagtt
120
acatgggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg
180
tcaggtgtac aaccgagAAC cttgcagacc agaatccaag actccgcagc atgtgtgtgc
240
cggggcgggg cagcagctgt tggaggagaa agccatcagt gtatttagag gcaaagggct
300
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360
ctctccgca
369

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<210> 1374
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 1374
Met Ala Glu Asn Phe Phe His His Asn Leu Arg Val Thr Gly Ser Tyr
 1          5          10          15
Met Gly Phe Met Gly Arg His Gly Phe Arg Val Leu Leu Ala Gly Pro
          20          25          30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
          35          40          45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
          50          55          60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65          70          75          80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
          85          90          95
Leu Arg

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<210> 1375
 <211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

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 ggctggcact ggcccgccctt caacatcgct gacatggcca tcgtgggcgg ggcgatcgcg
 120
 ctggtggccc agtcgttcat gagcgtggag aaccggccg ccacaaagga gtcccagtga
 180
 cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac
 240
 ggccccagc atgagcggcc gcggcttggc cctcatgcta gc
 282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

Xaa Ala Phe Asp Arg Ala Thr Arg Gly His Val Ile Asp Tyr Ile Asp
 1 5 10 15
 Phe His Leu His Gly Trp His Trp Pro Ala Phe Asn Ile Ala Asp Met
 20 25 30
 Ala Ile Val Gly Gly Ala Ile Ala Leu Val Ala Gln Ser Phe Met Ser
 35 40 45
 Val Glu Asn Pro Ala Ala Thr Lys Glu Ser Gln
 50 55

<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

tagtaagaca ggtgccttca gttcactctc agtaaggggc tggttgcctg catgagtgtg
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 tgctctgtgt cactgtggat tggagttgaa aaagcttgac tggcgtcatt caggagctgg
 120
 atggcgtggg acatgtgcaa ccaggactct gagtctgtat ggagtgcacat cgagtgtgct
 180
 gctctggttg gtgaagacca gcctctttgc ccagatcttc ctgaacttga tctttctgaa
 240
 ctagatgtga acgacttgga tacagacagc tttctgggtg gactcaagtg gtgcagtgc
 300
 caatcagaaa taatatccaa tcagtacaac aatgagcctt caaacatatt tgagaagata
 360
 gatgaagaga atgaggcaaa cttgctagca gtctcacag agacactaga cagtctccct
 420
 gtggatgaag acggattgcc ctcatctgat gcgctgacag atggagacgt gaccactgac
 480
 aatgaggcta gtccttcctc catgcctgac ggcacccctc caccacagga ggcagaagag
 540

ccgtctctac ttaagaagct cttactggca ccagccaaca ctcagctaag ttataatgaa
600
tgcagtgggc tcagtagcca gaacatgca aatcacaatc acaggatcag aacaaaccct
660
gcaattgtta agactgagaa ttcattggagc aataaagcga agagtatttg tcaacagcaa
720
aagccacaaa gacgtccctg ctgggagctt ctcaaatatc tgaccacaaa cgatgaccct
780
cctcacacca aaccacaga gaacagaaac agcagcagag acaaatgcac ctccaaaaag
840
aagtcccaca cacagtgcga gtcacaacac ttacaagcca aaccaacaac tttatctctt
900
cctctgacct cagagtcacc aatgacccc aagggttccc catttgagaa caagactatt
960
gaacgcacct taagtgtgga actctctgga actgcaggcc taactccacc caccactcct
1020
cctcataaag ccaaccaaga taaccctttt agggcttctc caaagctgaa gtctcttgc
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aagactgtgg tgccaccacc atcaaagaag ccaggtaca gtgagtcttc tggtagacaa
1140
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1320
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1380
gggcagattt gttcttcac agattcagac cagtgtacc tgagagagac tttggaggca
1440
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1560
accggtgaac tgagggacag tgatttcagt aatgaacaat tctccaaact acctatgttt
1620
ataaatccag gactagccat ggatggcctg tttgatgaca gcgaagatga aagtgataaa
1680
ctgagctacc cttgggatgg cagcaatcc tattcattgt tcaatgtgtc tccttcttgt
1740
tcttctttta actctccatg tagagattct gtgtcaccac ccaaactcctt atttctcaa
1800
agaccccaa ggatgcgtc tcgttcaagg tccttttctc gacacaggtc gtgttccga
1860
tcacatatt ccaggtaag atcaaggctt ccaggcagta gatcctcttc aagatcctgc
1920
tattactatg agtcaagcca ctacagacac cgcacgcacc gaaattctcc cttgtatgtg
1980
agatcacgtt caagatgcgc ctacagccgt cggcccaggt atgacagcta cgaggaatat
2040
cagcacgaga ggctgaagag ggaagaatat cgcagagagt atgagaagcg agagtctgag
2100
agggccaagc aaaggagag gcagaggcag aaggcaattg aagagcgccg tgtgatttat
2160

gtcggtaaaa tcagacctga cacaacacgg acagaactga gggaccgttt tgaagttttt
2220
ggtgaaattg aggagtgcac agtaaactctg cgggatgatg gagacagcta tggtttcatt
2280
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<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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			20					25					30		
Leu	Pro	Glu	Leu	Asp	Leu	Ser	Glu	Leu	Asp	Val	Asn	Asp	Leu	Asp	Thr
			35				40					45			
Asp	Ser	Phe	Leu	Gly	Gly	Leu	Lys	Trp	Cys	Ser	Asp	Gln	Ser	Glu	Ile
	50					55					60				
Ile	Ser	Asn	Gln	Tyr	Asn	Asn	Glu	Pro	Ser	Asn	Ile	Phe	Glu	Lys	Ile
65					70					75				80	
Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
			85						90					95	
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
			100					105					110		
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

115	120	125
Pro Asp Gly Thr Pro Pro	Pro Gln Glu Ala Glu Glu	Pro Ser Leu Leu
130	135	140
Lys Lys Leu Leu Leu Ala	Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu	
145	150	155
Cys Ser Gly Leu Ser Thr	Gln Asn His Ala Asn His Asn His Arg Ile	160
165	170	175
Arg Thr Asn Pro Ala Ile Val	Lys Thr Glu Asn Ser Trp Ser Asn Lys	
180	185	190
Ala Lys Ser Ile Cys Gln Gln	Gln Lys Pro Gln Arg Arg Pro Cys Ser	
195	200	205
Glu Leu Leu Lys Tyr Leu Thr	Thr Asn Asp Asp Pro Pro His Thr Lys	
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Pro Thr Glu Asn Arg Asn Ser	Ser Arg Asp Lys Cys Thr Ser Lys Lys	
225	230	235
Lys Ser His Thr Gln Ser Gln	Ser Gln His Leu Gln Ala Lys Pro Thr	240
245	250	255
Thr Leu Ser Leu Pro Leu Thr	Pro Glu Ser Pro Asn Asp Pro Lys Gly	
260	265	270
Ser Pro Phe Glu Asn Lys Thr	Ile Glu Arg Thr Leu Ser Val Glu Leu	
275	280	285
Ser Gly Thr Ala Gly Leu Thr	Pro Pro Thr Thr Pro Pro His Lys Ala	
290	295	300
Asn Gln Asp Asn Pro Phe Arg	Ala Ser Pro Lys Leu Lys Ser Ser Cys	
305	310	315
Lys Thr Val Val Pro Pro Pro	Ser Lys Lys Pro Arg Tyr Ser Glu Ser	
325	330	335
Ser Gly Thr Gln Gly Asn Asn	Ser Thr Lys Lys Gly Pro Glu Gln Ser	
340	345	350
Glu Leu Tyr Ala Gln Leu Ser	Lys Ser Ser Val Leu Thr Gly Gly His	
355	360	365
Glu Glu Arg Lys Thr Lys Arg	Pro Ser Leu Arg Leu Phe Gly Asp His	
370	375	380
Asp Tyr Cys Gln Ser Ile Asn	Ser Lys Thr Glu Ile Leu Ile Asn Ile	
385	390	395
Ser Gln Glu Leu Gln Asp Ser	Arg Gln Leu Glu Asn Lys Asp Val Ser	
405	410	415
Ser Asp Trp Gln Gly Gln Ile	Cys Ser Ser Thr Asp Ser Asp Gln Cys	
420	425	430
Tyr Leu Arg Glu Thr Leu Glu	Ala Ser Lys Gln Val Ser Pro Cys Ser	
435	440	445
Thr Arg Lys Gln Leu Gln Asp	Gln Glu Ile Arg Ala Glu Leu Asn Lys	
450	455	460
His Phe Gly His Pro Ser Gln	Ala Val Phe Asp Asp Glu Ala Asp Lys	
465	470	475
Thr Gly Glu Leu Arg Asp Ser	Asp Phe Ser Asn Glu Gln Phe Ser Lys	
485	490	495
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Asp Ser Glu Asp Glu Ser Asp	Lys Leu Ser Tyr Pro Trp Asp Gly Thr	
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<211> 590
<212> DNA
<213> Homo sapiens
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 Cys Pro Cys Arg Val Ala Ala Ser Pro Ile Ser Ala Leu Gly Val Pro
 35 40 45
 Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys
 50 55 60
 Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg
 65 70 75 80
 Val Xaa Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa
 85 90 95
 Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro
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 <213> Homo sapiens

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<210> 1382

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1382

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      20             25             30
Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
      35             40             45
Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
      50             55             60
Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
65             70             75             80
Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
      85             90             95
Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
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Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu
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<210> 1383

<211> 906

<212> DNA

<213> Homo sapiens

<400> 1383

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 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
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 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
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<210> 1385
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1385
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 <212> PRT
 <213> Homo sapiens

<400> 1386
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 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Ala Cys Met His Gly Val Cys

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          35              40              45
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Thr Gly Gly Cys Val Cys
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<210> 1387

<211> 521

<212> DNA

<213> Homo sapiens

<400> 1387

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<210> 1388

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<212> PRT

<213> Homo sapiens

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    20              25              30
Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
    35              40              45
Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
    50              55              60
Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
65              70              75              80
Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
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<210> 1389

<211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
		35					40				45				
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
		50				55					60				
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70					75				80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90					95		
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
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Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

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Asp	Ala	Asp	Phe	Ser	Thr	Gly	Arg	Gly	Thr	Thr	Phe	Tyr	Gln	Glu	Tyr
145					150					155					160
Glu	Thr	Phe	Tyr	Gly	Glu	His	Ser	Leu	Leu	Val	Gln	Gln	Ala	Glu	Ser
				165						170					175
Trp	Ile	Arg	Lys	Ile	Thr	Asn	Asn	Gly	Gly	Tyr	Lys	Ala	Arg	Trp	Ala
			180					185					190		
Leu	Lys	Val	Thr	Trp	Val	Asn	Ala	His	Ala	Tyr	Pro	Ala	Gln	Trp	Thr
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Leu	Gly	Ser	Asn	Thr	Tyr	Gln	Ala	Ile	Leu	Ser	Thr	Asp	Gly	Ser	Arg
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Ser	Tyr	Ala	Leu	Phe	Leu	Tyr	Gln	Ser	Gly	Gly	Met	Gln	Trp	Asp	Val
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Ala	Gln	Arg	Ser	Gly	Asn	Pro	Val	Leu	Met	Gly	Phe	Ser	Ser	Gly	Asp
			245						250					255	
Gly	Tyr	Phe	Glu	Asn	Ser	Pro	Leu	Met	Ser	Gln	Pro	Val	Trp	Glu	Arg
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Tyr	Arg	Pro	Asp	Arg	Phe	Leu	Asn	Ser	Asn	Ser	Gly	Leu	Gln	Gly	Leu
	275						280					285			
Gln	Phe	Tyr	Arg	Leu	His	Arg	Glu	Glu	Arg	Pro	Asn	Tyr	Arg	Leu	Glu
	290					295					300				
Cys	Leu	Gln	Trp	Leu	Lys	Ser	Gln	Pro	Arg	Trp	Pro	Ser	Trp	Gly	Trp
305				310						315					320
Asn	Gln	Val	Ser	Cys	Pro	Cys	Ser	Trp	Gln	Gln	Gly	Arg	Arg	Asp	Leu
			325						330					335	
Arg	Phe	Gln	Pro	Val	Ser	Ile	Gly	Arg	Trp	Gly	Leu	Gly	Ser	Arg	Gln
	340						345						350		
Leu	Cys	Ser	Phe	Thr	Ser	Trp	Arg	Gly	Gly	Val	Cys	Cys	Ser	Tyr	Gly
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Pro	Trp	Gly	Glu	Phe	Arg	Glu	Gly	Trp	His	Val	Gln	Arg	Pro	Trp	Gln
	370					375					380				
Leu	Ala	Gln	Glu	Leu	Glu	Pro	Gln	Ser	Trp	Cys	Cys	Arg	Trp	Asn	Asp
385				390						395					400
Lys	Pro	Tyr	Leu	Cys	Ala	Leu	Tyr	Gln	Gln	Arg	Arg	Pro	His	Val	Gly
			405						410					415	
Cys	Ala	Thr	Tyr	Arg	Pro	Pro	Gln	Pro	Ala	Trp	Met	Phe	Gly	Asp	Pro
	420							425					430		
His	Ile	Thr	Thr	Leu	Asp	Gly	Val	Ser	Tyr	Thr	Phe	Asn	Gly	Leu	Gly
	435					440						445			
Asp	Phe	Leu	Leu	Val	Gly	Ala	Gln	Asp	Gly	Asn	Ser	Ser	Phe	Leu	Leu
	450					455				460					
Gln	Gly	Arg	Thr	Ala	Gln	Thr	Gly	Ser	Ala	Gln	Ala	Thr	Asn	Phe	Ile
465					470					475					480
Ala	Phe	Ala	Ala	Gln	Tyr	Arg	Ser	Ser	Ser	Leu	Gly	Pro	Val	Thr	Val
			485						490					495	
Gln	Trp	Leu	Leu	Glu	Pro	His	Asp	Ala	Ile	Arg	Val	Leu	Leu	Asp	Asn
	500						505					510			
Gln	Thr	Val	Thr	Phe	Gln	Pro	Asp	His	Glu	Asp	Gly	Gly	Gly	Gln	Glu
	515					520					525				
Thr	Phe	Asn	Ala	Thr	Gly	Val	Leu	Leu	Ser	Arg	Asn	Gly	Ser	Glu	Val
	530				535						540				
Ser	Ala	Ser	Phe	Asp	Gly	Trp	Ala	Thr	Val	Ser	Val	Ile	Ala	Leu	Ser
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Asn	Ile	Leu	His	Ala	Ser	Ala	Ser	Leu	Pro	Pro	Glu	Tyr	Gln	Asn	Arg

				565					570					575			
Thr	Glu	Gly	Leu	Leu	Gly	Val	Trp	Asn	Asn	Asn	Pro	Glu	Asp	Asp	Phe		
			580					585					590				
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			595				600					605					
Leu	Phe	His	Phe	Gly	Met	Thr	Trp	Gln	Ile	Asn	Gly	Thr	Gly	Leu	Leu		
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				645					650					655			
Cys	Asp	Gly	Asp	Ser	Ser	Cys	Ile	Tyr	Asp	Thr	Leu	Ala	Leu	Arg	Asn		
			660					665					670				
Ala	Ser	Ile	Gly	Leu	His	Thr	Arg	Glu	Val	Ser	Lys	Asn	Tyr	Glu	Gln		
			675				680					685					
Ala	Asn	Ala	Thr	Leu	Asn	Gln	Tyr	Pro	Pro	Ser	Ile	Asn	Gly	Gly	Arg		
			690			695					700						
Val	Ile	Glu	Ala	Tyr	Lys	Gly	Gln	Thr	Thr	Leu	Ile	Gln	Tyr	Thr	Ser		
705					710						715				720		
Asn	Ala	Glu	Asp	Ala	Asn	Phe	Thr	Leu	Arg	Asp	Ser	Cys	Thr	Asp	Leu		
				725					730					735			
Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu		
			740					745					750				
Pro	Phe	Thr	Leu	Glu	Ile	Leu	Ala	Arg	Ser	Ala	Lys	Ile	Gly	Leu	Ala		
			755				760					765					
Ser	Ala	Leu	Gln	Pro	Arg	Thr	Val	Val	Cys	His	Cys	Asn	Ala	Glu	Ser		
					775						780						
Gln	Cys	Leu	Tyr	Asn	Gln	Thr	Ser	Arg	Val	Gly	Asn	Ser	Ser	Leu	Glu		
785					790					795					800		
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			820					825					830				
Val	Pro	Gly	Lys	Gly	Cys	Glu	Ala	Cys	Pro	Pro	Asn	Leu	Thr	Gly	Asp		
			835				840					845					
Gly	Arg	His	Cys	Ala	Ala	Leu	Gly	Ser	Ser	Phe	Leu	Cys	Gln	Asn	Gln		
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Gln	Thr	Leu	Gly	Cys	Gln	Pro	Met	Cys	Thr	Cys	Pro	Pro	Ala	Phe	Thr		
				885					890					895			
Asp	Ser	Arg	Cys	Phe	Leu	Ala	Gly	Asn	Asn	Phe	Ser	Pro	Thr	Val	Asn		
			900					905					910				
Leu	Glu	Leu	Pro	Leu	Arg	Val	Ile	Gln	Leu	Leu	Leu	Ser	Glu	Glu	Glu		
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          995              1000              1005
Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
  1010              1015              1020
Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
  1025              1030              1035              1040
Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045              1050              1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060              1065              1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
          1075              1080              1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
          1090              1095              1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
  1105              1110              1115              1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
          1125              1130              1135
Phe Trp Gly Cys Ser Gly Ala Arg Phe Ser Tyr Phe Leu Asn Ser Ala
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Glu Ala Leu Pro
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<210> 1391
 <211> 481
 <212> DNA
 <213> Homo sapiens

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<400> 1391
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caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc
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ggccagcaac agcgcattggc gattgcccgg gccctggcca tgtcgccgga ctacatgctg
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481

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<210> 1392
 <211> 160
 <212> PRT
 <213> Homo sapiens

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<400> 1392
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      20             25             30
Leu  Thr  Val  Leu  Glu  Asn  Val  Met  Leu  Ala  Pro  Arg  Lys  Val  Leu  Gly
      35             40             45
Lys  Ser  Lys  Gln  Lys  Ala  Glu  Glu  Leu  Ala  Val  Arg  Gln  Leu  Thr  His
      50             55             60
Val  Gly  Leu  Ser  Asp  Lys  Leu  Lys  Thr  Phe  Pro  Ala  Xaa  Leu  Ser  Gly
      65             70             75             80
Gly  Gln  Gln  Gln  Arg  Met  Ala  Ile  Ala  Arg  Ala  Leu  Ala  Met  Ser  Pro
      85             90             95
Asp  Tyr  Met  Leu  Phe  Asp  Glu  Ala  Thr  Ser  Ala  Leu  Asp  Pro  Gln  Leu
      100            105            110
Val  Gly  Glu  Val  Leu  Asp  Thr  Met  Arg  Met  Leu  Ala  Glu  Asp  Gly  Met
      115            120            125
Thr  Met  Val  Leu  Val  Thr  His  Glu  Ile  Arg  Phe  Ala  Arg  Asp  Val  Ser
      130            135            140
Asp  Arg  Val  Ala  Phe  Phe  Arg  Asn  Gly  Leu  Val  His  Glu  Ile  Gly  Ala
      145            150            155            160

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<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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tgggcccttc tgcgccgtca gggcatcagg tggcccgtcg cancggtgga gcgcctcatg
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cgggacaacc ggtggcgtgg ggtgaccgcg cgtaagaagg ttncgcacca ccatcgctga
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cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
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caagttgct
309

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<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

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Arg  Pro  Pro  Ser  Ala  Arg  Ala  Leu  Trp  Asp  Met  Ala  Ile  Thr  Glu  Val
      1             5             10             15
Leu  Ala  Gly  Tyr  Tyr  Glu  Pro  Asp  Glu  His  Gly  His  Arg  Lys  Pro  Glu
      20             25             30
Ser  Leu  Tyr  Gly  Ala  Val  Lys  Met  Trp  Ala  Leu  Leu  Arg  Arg  Gln  Gly
      35             40             45
Ile  Arg  Trp  Pro  Ala  Ala  Xaa  Val  Glu  Arg  Leu  Met  Arg  Asp  Asn  Arg
      50             55             60
Trp  Arg  Gly  Val  Thr  Arg  Arg  Lys  Lys  Val  Xaa  His  His  His  Arg

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65 70 75

<210> 1395
<211> 347
<212> DNA
<213> Homo sapiens

<400> 1395
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tatgacggta gtcgtgggcg aaacgggtgct tgtcgttgtg cgccgtcaac gtcgaagagc
120
ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
180
gtcgggtgggg gagatccctt cagttgcact agagcacgtg gccgatgacg tggagggtatt
240
ggctcaggct aggcgggctc atgcagtggg cggaagcggt tccgacgccc tcattgccac
300
ctcccggcaa ccagggatgg ctgggtctggt gccactagcc cacgcgt
347

<210> 1396
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1396
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20 25 30
Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35 40 45
Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
50 55 60
Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65 70 75 80
Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85 90 95

<210> 1397
<211> 308
<212> DNA
<213> Homo sapiens

<400> 1397
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120
aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180
ggtcgactgt cctgcagcga cccggcgctc gctgccacc agatacaaag cctgctcaag
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 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
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 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
 20 25 30
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
 65 70 75 80
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
 85 90

<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
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 120
 ttagatatTT taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag
 180
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat
 240
 ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgctg
 300
 cacagacagc ctctatataa cccaccctgt tgggggtattg aatTTTTTct tttcccgccc
 360
 tactttttaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
 420
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaaatggg
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<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

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Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
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Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
           20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
           35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
           50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
           85           90

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<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

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cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
120
ncattggggg ttgatggccg cgtttccctg ctgctggggc cgatccctcat cgtcaccggc
180
ccaacggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtctctg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctcggcgcca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttcgtcggc cccatcgggt ggatcgtcac cgcatgatg
420
aaacggcacc tcatcccga cttcctacaa ggcgtagatt tcgttggggg cgcggttggg
480
acgtgtgttg gcgctaact cattcgggag gaatcgggcc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacct gagcttgagc ccgtcatcga gttcaaggaa
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653

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<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

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Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
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Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
           20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

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      35              40              45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
  50              55              60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
  65              70              75              80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
      85              90              95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
      100              105              110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
      115              120              125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
      130              135              140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
      145              150              155              160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
      165              170              175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
      180              185              190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
      195              200              205
Val Leu Phe Ile Met Leu Ala Gly Arg
      210              215

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<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

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tgtgccacat gaaatggaac acgggcaaac atatctgac caggaaacat tagccaagta
  120
tgttccttgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca
  180
gagcttcctt ccatctcttt cattatgacc tcaaaggagg atggcacgct agtcttggac
  240
gtcctagctt gtttccgaag ggctgtcaga gcctccctgt taccatttct tatcttatca
  300
ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
  360
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  393

```

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

```

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1              5              10              15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

	20		25		30										
Asn	Gly	Asn	Arg	Glu	Ala	Leu	Thr	Ala	Leu	Arg	Lys	Gln	Ala	Arg	Thr
	35						40					45			
Ser	Lys	Thr	Ser	Val	Pro	Ser	Pro	Phe	Glu	Val	Ile	Met	Lys	Glu	Met
	50					55					60				
Glu	Gly	Ser	Ser	Gly	Lys	Gln	Leu	Ile	Lys	Glu	Ile	Cys	Pro	Thr	Cys
65					70					75				80	
Gly	Asp	His	Asp	Pro	Lys	Glu	His	Thr	Trp	Leu	Met	Phe	Pro	Gly	Ser
				85					90				95		
Asp	Met	Phe	Ala	Arg	Val	Pro	Phe	His	Val	Ala	His	Thr	Val	Val	Glu
			100					105					110		
Lys	Asp	Gln	Glu	Arg	Leu	Asp	Leu	Asp	Thr	Lys	Lys	Leu	Gln	Ser	
	115						120						125		

<210> 1405

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1405

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nnccgactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtaaaa
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120
gaagagttcg ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gccgaacgt gcgcgacgtg
240
ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccgggtggg caaggcgggtg
300
ggcacgggtgt tcgccaagtc gcaactggtg atccgccata ccgccgaaga cacctgggaa
360
ctgctgatcc gtcgcagctt ctcggtattac tgggtggtgt ggttgcagga cgcggctgca
420
t
421

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<210> 1406

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1406

Xaa	Arg	Leu	His	Lys	Ala	Leu	Gly	Ile	Glu	Leu	Pro	Gly	Ala	Leu	Gln
1				5					10				15		
Val	Ile	Val	Lys	Gly	Glu	Thr	Ser	Leu	Gln	Trp	Leu	Gly	Pro	Asp	Glu
			20					25				30			
Trp	Leu	Leu	Ile	Val	Pro	Ser	Gly	Glu	Glu	Phe	Ala	Ala	Glu	Gln	Asn
	35						40					45			
Leu	Arg	Ala	Ala	Leu	Gly	Glu	Leu	His	Ile	Gln	Val	Val	Asn	Val	Ser
	50					55					60				
Gly	Gly	Gln	Gln	Ile	Leu	Glu	Leu	Ser	Gly	Pro	Asn	Val	Arg	Asp	Val
65					70				75				80		
Leu	Met	Lys	Ser	Thr	Ser	Tyr	Asp	Val	His	Pro	Asn	Asn	Phe	Pro	Val

	85		90		95
Gly Lys Ala Val Gly Thr Val Phe Ala Lys Ser Gln Leu Val Ile Arg					
	100		105		110
His Thr Ala Glu Asp Thr Trp Glu Leu Leu Ile Arg Arg Ser Phe Ser					
	115		120		125
Asp Tyr Trp Trp Leu Trp Leu Gln Asp Ala Ala Ala					
	130		135		140

<210> 1407

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 1407

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ctgctggagt ttgtctacac gggctccctg gtcctcgact cgccaacgc caagacactg
120
ctggaggcgg ccagcaagtt ccagttccac accttctgca aagtctgctg gtcctttctt
180
gagaagcagc tgacggccag caactgcctg ggcgttgctg ccatggccga ggccatgcag
240
tgcagcgagc tctaccacat ngccaaggcc ttcgcgctgc agatcttccc cgaggtggcc
300
gcccaggagg agatcctcag catctccaag gacgacttca tcgcctacgt ctccaacgac
360
agcctcaaca ccaaggctga ggagctggtg tacgagacag tcatcaagtg gatcaagaag
420
gaccccgcca caagcacaca gtacgcggct gagctcctgg ccgtgggtccg cctccccttc
480
atccacccca gctacctgct caatgtggtt gacaatgaag agctgatcaa gtcctcagaa
540
gcctgccggg acctgggtgaa cgaggccaaa cgctaccata tgctgcccc agcccgccag
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gagatgcaga cgcgccgaac ccggccgcgc ctctctgcag gtgtggctga ggtcatcgtc
660
ttggttgggg gccgtcagat ggtgggggatg acccagcgct cgctggtggc cgtcacctgc
720
tggaacccgc agaacaacaa gtggtacccc ttggcctcgg tgcccttttt aggcccgga
780
ttcttcagtg tagtgagtgc aggggccaac atctacctct caggtgggat ggaatcaggg
840
gtgccgctgg ctgatgtctg gtgctacatg tcctgcttg ataactggaa cctcgtctcc
900
agaatgccag tcccccgctg tcggccccat agcctcgtct acgatgggaa gatttacacc
960
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1006

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<210> 1408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 1408

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Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
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Val Leu Glu Leu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
          20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
          35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
          50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
          85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
          100          105          110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
          115          120          125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
          130          135          140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
145           150           155           160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
          165          170          175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
          180          185          190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
          195          200          205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
          210          215          220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
225           230           235           240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
          245          250          255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
          260          265          270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
          275          280          285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
          290          295          300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
305           310           315           320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
          325          330          335

```

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg cgcgcccgcg
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gcacgagata gcaccatgca actgatcgat atcggcgtca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaattgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg ccacactgtt cgccacggcc ggcgtgcac
 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
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 Gly Arg Pro Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 1411
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 120
 gattttcaat ctattttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatacctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcggt
 300
 actacttttc gtcaaaagct t
 321

<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1412
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp
 1 5 10 15
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

                20                25                30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
                35                40                45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
                50                55                60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
        65                70                75                80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
                85                90                95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
                100                105

```

<210> 1413

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1413

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atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgatcct gatcgaagac
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ggcgaaatcg gcctcgacct gatcatcgac ctgccacgtc cgcgtgcccg tggttcacac
120
cgcttggccg cgttgggaagc cgaagtgata aaccgtgtgc tgtcataacc cngcacgaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttgggctca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
caaggaaatc gtagtcggca acgtgctctc ggaaatcgac gtgcagaccg cctccgggat
360
cgtcacttct gtgatcacta cgcgt
385

```

<210> 1414

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1414

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Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
1          5          10          15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
20          25          30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
35          40          45
Val Ile Asn Arg Val Leu Ser
50          55

```

<210> 1415

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1415

acgcgtgcag gcaaacatta atatgagtta acaccacaca ggatgagact gtttgtacct
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 gtaactgtcc ttgtcatctg tcttgcagat ttagaagagg aatcagaaag ctgggacaac
 120
 tctgaggctg aagaggagga gaaagcccct gtgttgccag agagtacaga agggcgggag
 180
 ctgacccagg gcccggcaga gtctctctct ctctcaggct gtgggagctg gcagccccgg
 240
 aagctgccag tcttcaagtc cctccggcac atgaggcagg tcttgggtgc cccttcttct
 300
 cgcatgctgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg
 360
 gacctcgctc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc
 420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
1				5					10					15	
Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln	
	50					55				60					
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65				70					75					80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85					90					95		
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
			100					105					110		
Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
		115					120								

<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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 120
 taggaggggtg gccaccccat ttccagtgtg acctgttccc attcccccat gtctctctcc
 180
 atccctcccc ccactcagct caggctgatg agaagcagag caacgggtgt atcggtgttt
 240
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 300

cccgccctct tttgtcctct tcccagggtc cctggccctc tcggagaaac gcacttggtt
 360
 cgggccagcc gcctgagggg acgggctcac gtctgtcctt cactctgcag ctgctgggcc
 420
 gtggagcttc cccaggggag cagggggact tttgccgcag ccatgaaggg ggcacgctgg
 480
 aggaggggtc cctgggtgtc cctgagctgc ctgtgtctct gcctccttcc gcatgtggtc
 540
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 600
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 660
 aatcaggaca tatcagcttc atctcagaac caccagacta agagcacgga gaccaccagc
 720
 aaagctcaaa ccgacacctt cagcgagatg atgacatcaa ctcttttttc ttccccaagt
 780
 gtacacaatg tgatggagac tgttacgcag gagacagctc ctccagatga aatgaccaca
 840
 tcatttccct ccagtgtcac caacacactc atgatgacat caaagactat aacaatgaca
 900
 acctccacag actccactct tggaacacac gaagagacat caacagcagg aactgaaagt
 960
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 1020
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 1080
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 1140
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 1260
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 1380
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 1440
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 1500
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 1560
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 1620
 agtgtcagca atacattcct ggtaacatca aagggtgtca gaatgccaat ctccagagac
 1680
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 1740
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 1800
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 1860
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 1920